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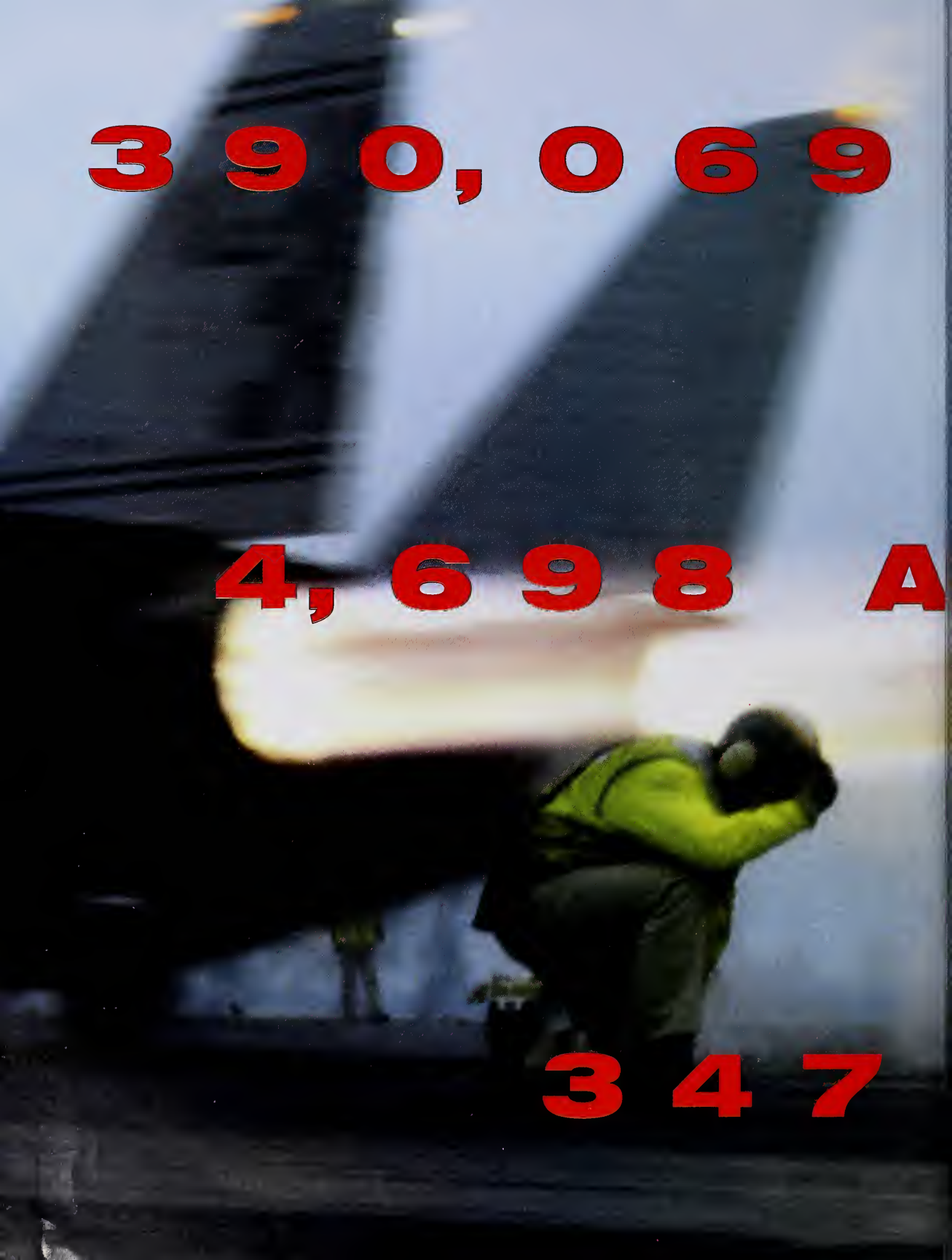
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ALL HANDS
MAGAZINE OF THE U.S. NAVY
JANUARY 1998



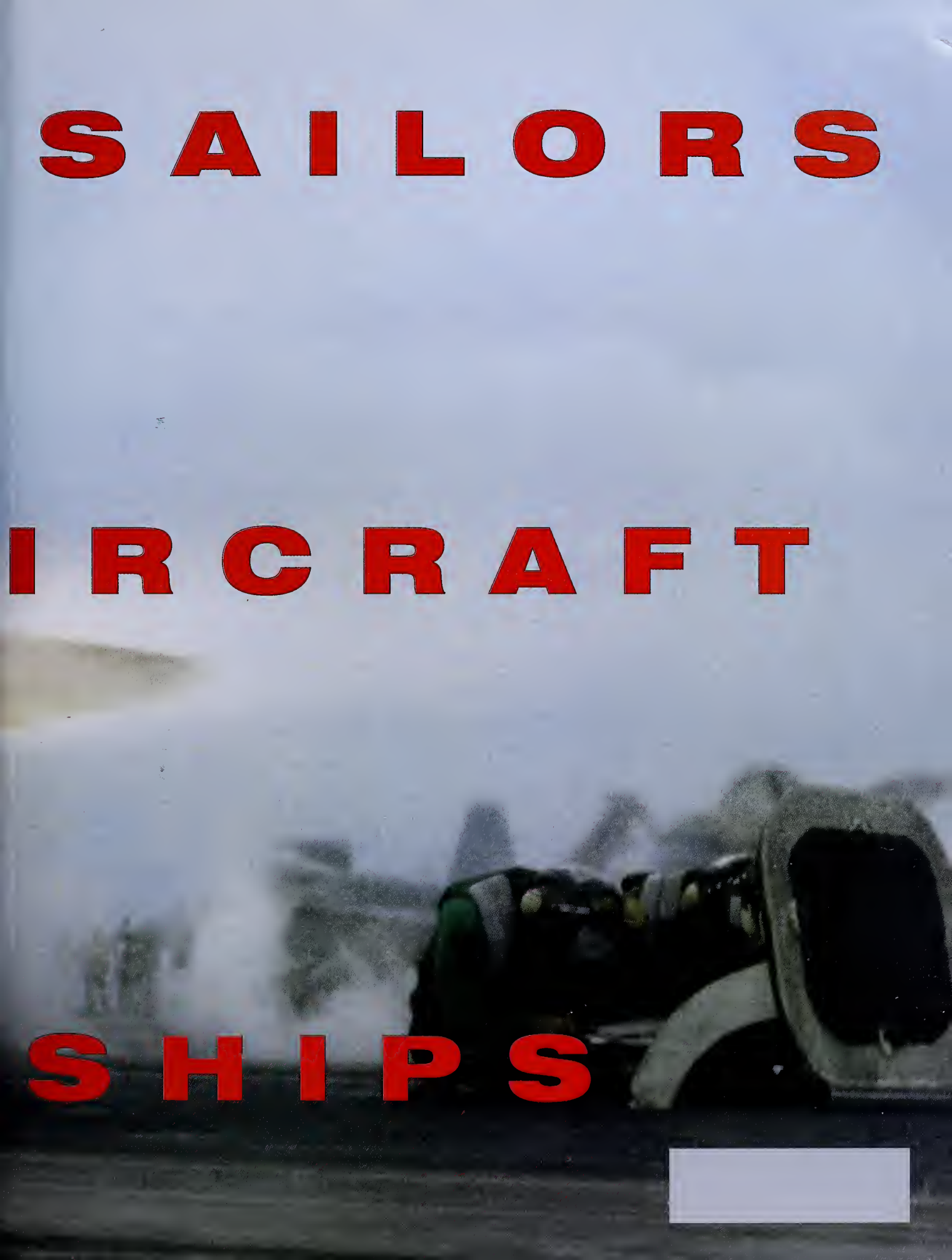
THE FLEET

OWNER'S AND OPERATOR'S MANUAL


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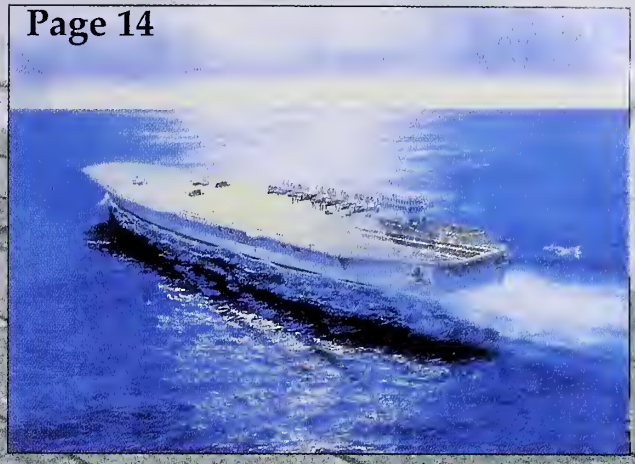


Illustration courtesy of Newport News Shipbuilding

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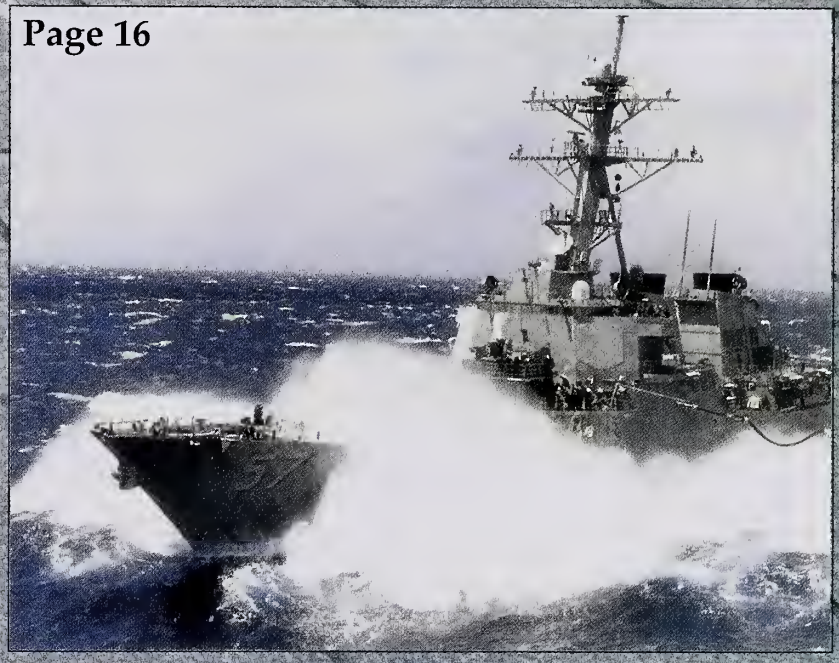


Photo by PHAN Jacob L. Hollingsworth

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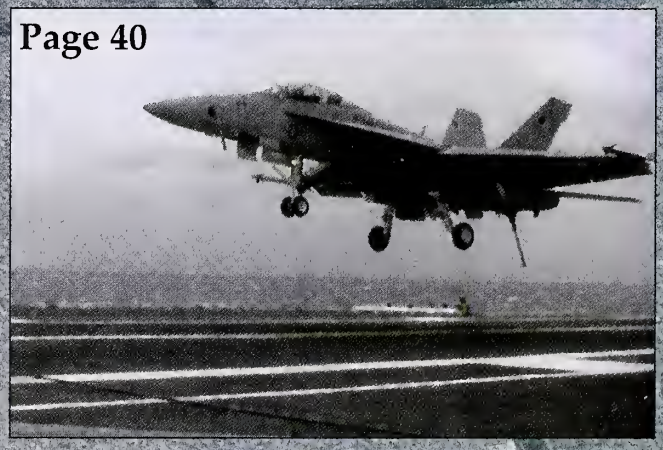


Photo by PH2 Richard L. Soileaux

Inside Front Cover

On board the aircraft carrier USS *Nimitz* (CVN 68), LT Michael Stone from Valley Center, Calif., completes signal instructions to launch an F-14 *Tomcat*. *Nimitz* and Carrier Air Wing 9 (CVW-9) are currently operating in the Arabian Gulf in support of Operation *Southern Watch,* enforcing the U.N. "No-Fly Zone" over Southern Iraq. (Photo by PH2 James Watson)

THE FLEET



Photo by Jason Dent

"A great nation must have a great Navy."
- Theodore Roosevelt

Geography and world events have conspired to make the United States a sea power. Sitting astride two oceans and commanding one of the world's most dynamic maritime economies, it is inevitable that America should count upon a strong naval force to ensure both our freedom and our livelihood. And for more than two centuries, the U. S. Navy has delivered on that promise. From the Barbary Coast in 1800 to the shores of Kuwait in 1990; from the Gulf of Mexico to the Persian Gulf — the Fleet has been there, protecting American honor, American interests and American lives. It is *still* there.



Photo by LTJG Marc Boyd

In this era of "chaotic peace," where threats to national security are at once ambiguous and daunting, such forward presence is reassuring. Even at this writing, there are two carrier battle groups poised in the Persian Gulf to answer our nation's call. *And they are ready.*

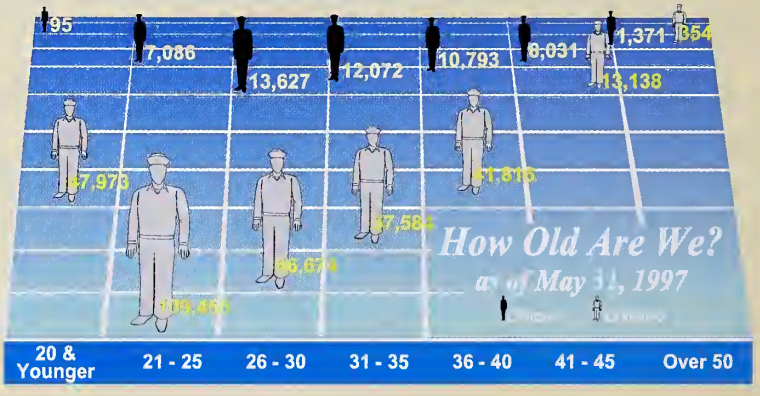
On the pages that follow you'll get a snapshot of the Fleet today: its people, its ships and its aircraft. You will also journey into the future. You'll see some of the new equipment our Sailors will train on, sail in and fight with. You'll not only learn firsthand *who and what* the Fleet is, you'll find out *where* that Fleet is heading: straight into the next century with a full head of steam.



Photo by JOCS Gary Smith

Sailors

The Chief of Naval Operations calls Sailors the Fleet's smartest weapon. A highly-trained, motivated team of active-duty and Reserve personnel entrusted to operate the most sophisticated equipment on earth, this team can project power anywhere at virtually a moment's notice and then stay there. And it is a diverse team as well, representing every state, every faith and every face in America. Sailors are your next-door neighbors, the high school all-star athlete, the student council president. They are your schoolteachers, pharmacists and your dentists. No matter their background, no matter their hometowns, each one brings honor, courage and commitment to the task at hand. No matter how different one may be from the other, they are all woven together by the common thread of duty. They are Americans, and their diversity only makes the Fleet stronger. Imbued with a special trust, these young men and women are actively engaged in meaningful work around the globe right now, putting the skills and education they have received to good use. *And they are ready.*



"My goal is to give our people the tools they need to do what they have always done -- to go in harm's way and prevail."

- Admiral Jay L. Johnson
Chief of Naval Operations

Aircraft

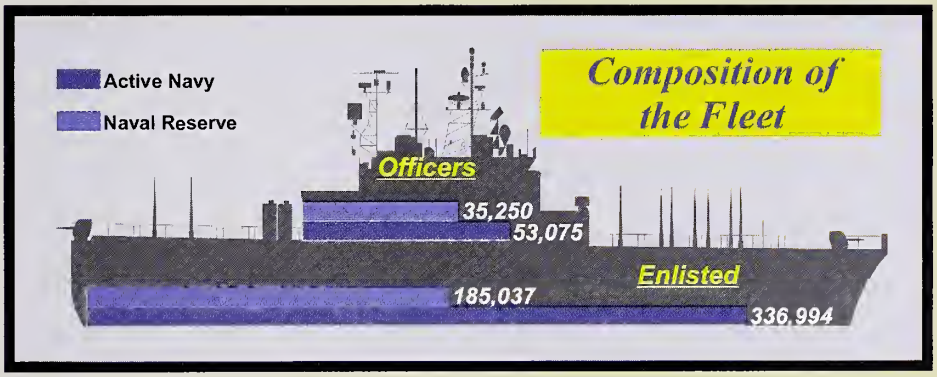
Forward presence and dominance of both the sea and the littoral are simply not possible without control of the corresponding airspace. That's where naval aviation comes in. In and of itself a unique team of people, aircraft and shore facilities, naval aviation provides maritime forces with incredible flexibility and rapid response. Our aircraft are multifaceted, capable of a broad range of missions and payloads. Indeed, they have become key elements in the Navy's ability to achieve its operational and tactical objectives. Most Fleet ships have the capability to support air operations and all of them can be serviced by helicopters. The arsenal of aircraft in today's Fleet is absolutely essential to success. And it's getting better all the time.

The introduction of the new F/A-18E/F *Super Hornet* to the Fleet in 2000 will provide range/payload improvements, survivability enhancements, weapon bring-back improvements and critical growth capacity, all of which are required to keep the strike-fighter force lethal and viable well into the next century. Ultimately the single-seat version of the *Super Hornet* will replace older versions of the F/A-18, while the two-seat F/A-18F will replace the F-14 *Tomcat*. In any case, it is proof positive that naval aviation will continue to have an important stake in maritime operations. Beyond the *Super Hornet*, the Navy is working with its sister services on the development of the Joint Strike Fighter (JSF). Essentially designed to complement the F/A-18E/F, the Fleet's version of the JSF will be a stealthy, multi-role strike fighter, the first of which is expected to be delivered in 2008.

Today, there are hundreds of U.S. naval aircraft preparing to take off. Some are stationed at various land bases around the world, and some are unfolding their wings on the decks of our aircraft carriers. Wherever they are, wherever they are going, they are in the hands of the best pilots, the best aircrew and the best maintenance personnel in American military history. *And they are ready.*



Photo by Gunnery Sgt Daniel Mobley



Ships

The Fleet sails the most powerful, technologically-advanced warships in the world. No other Navy can put to sea with a force equal to that of the United States. Our nuclear-powered aircraft carriers, surface combatants and submarines give us a distinct tactical advantage in any environment against any threat. And looming on the horizon are platforms such as CVN 77 and CVX, the next generation aircraft carriers; DD 21, the next generation surface combatant; LPD 17, the gator of the future; and New Attack Submarine — providing undersea supremacy into the 21st century. These ships will be more than just specialized units, they will ensure dominance across the spectrum of naval warfare. One hundred years ago, people gazed in awe at a new class of British battleships known as the *Dreadnought*. Tomorrow, people will gaze in awe at our American warships.

But power and technology are only part of the equation. To be an effective tool of national policy, a navy must be ready, on station and alert. All the hardware in the world won't make a difference if it isn't smartly employed. As you read this, more than half of our Fleet is at sea, its readiness assured by the professionalism and dedication of its crews. Our ships may be the Fleet's lifeblood, but our Sailors are its heart. *And they are ready.*

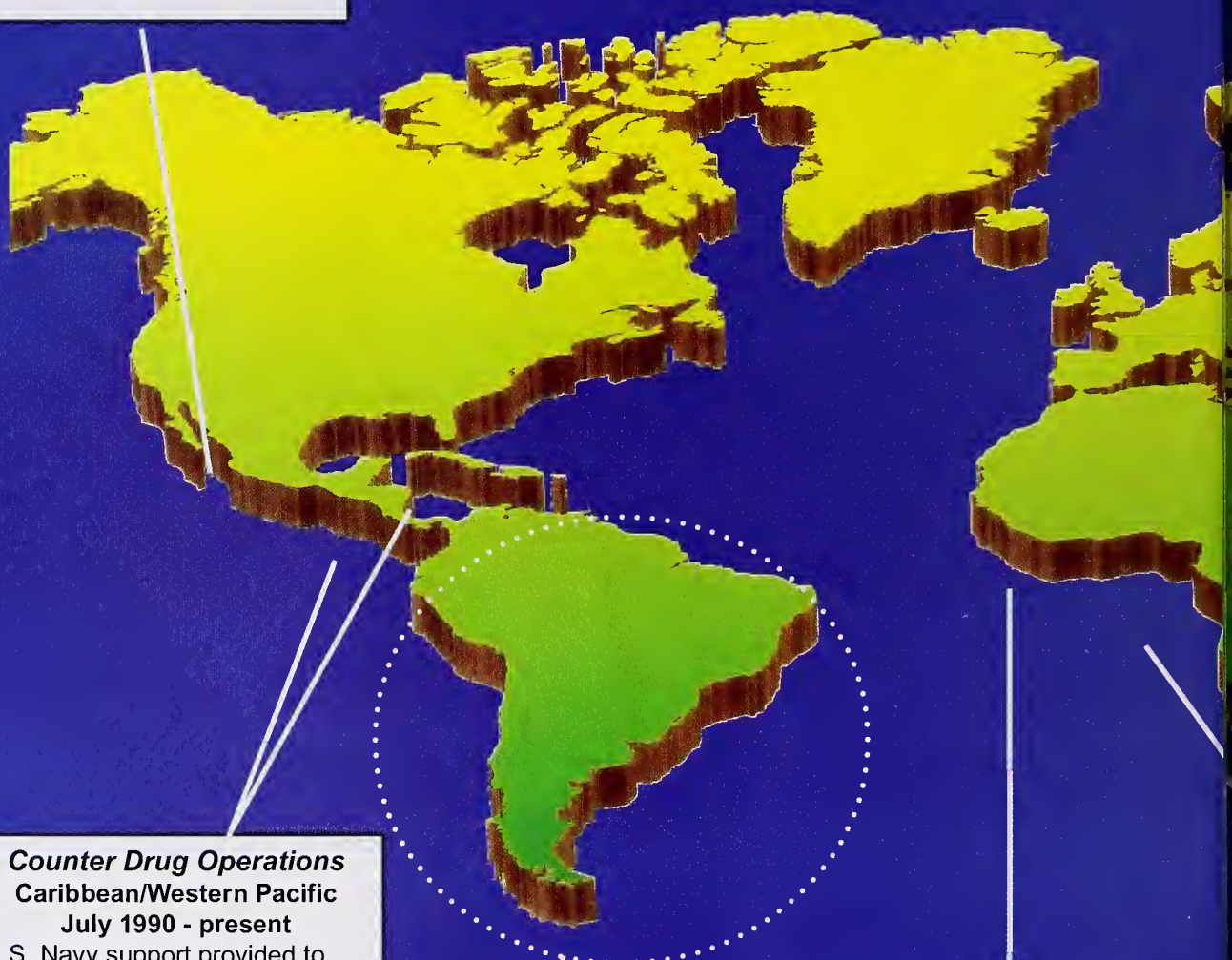
Welcome to this, the fifth installment of the All Hands Owner's and Operator's Manual.

Forward ...From The Sea

Navy Operations

A sampling of the U.S. Navy's worldwide presence

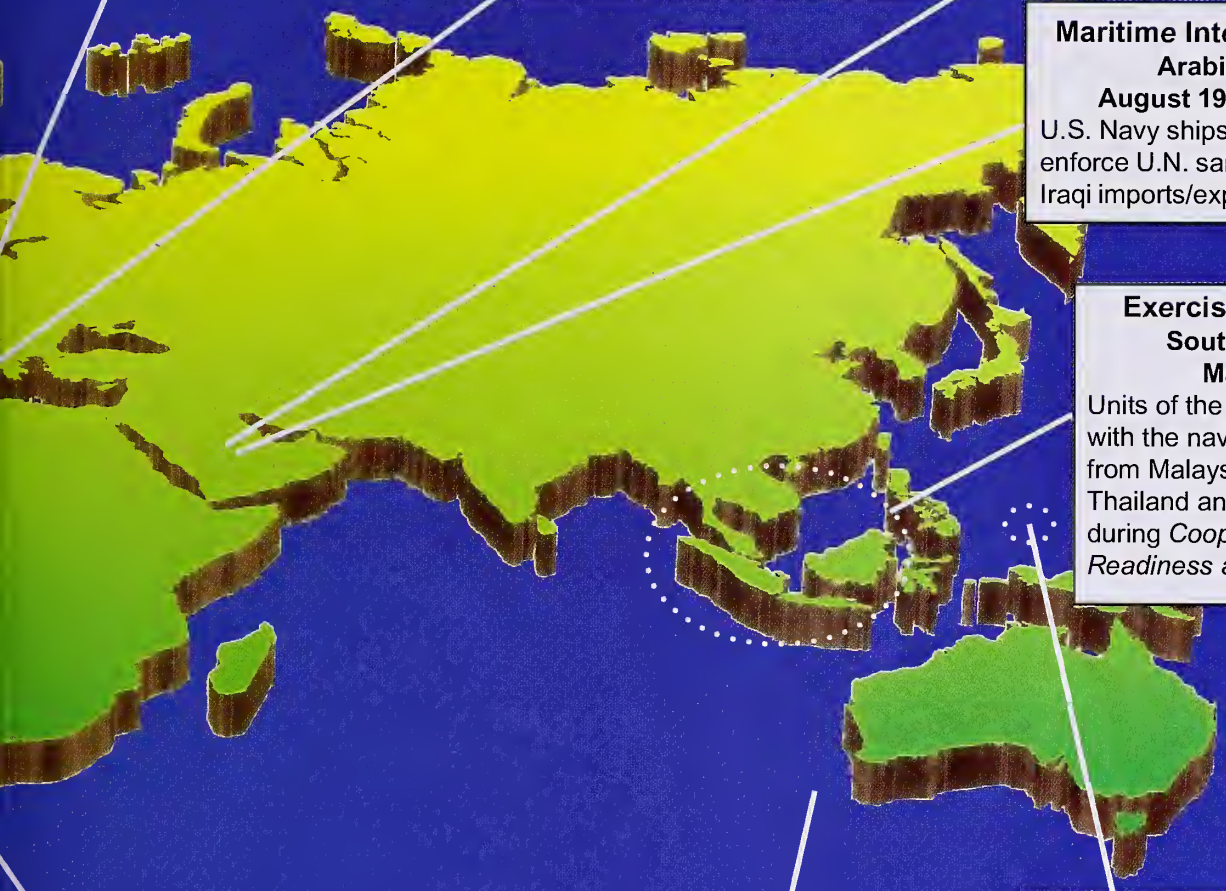
Exercise *Kernel Blitz '97*
Southern California
June-July 1997
More than 12,000 Sailors, Marines and Reservists, 24 ships and a variety of Navy, Marine Corps, Army, Air National Guard and Coast Guard aircraft conducted amphibious operations along the California coast



Counter Drug Operations
Caribbean/Western Pacific
July 1990 - present
U.S. Navy support provided to law enforcement agencies conducting counterdrug operations in the Western Hemisphere.

Exercise *UNITAS '97*
Latin America
July-November 1997
U.S. Navy and Coast Guard ships joined with navies from 11 nations that circumnavigate Latin America and support regional stability.

Operation *Noble Obelisk*
Sierra Leone
May-June 1997
USS *Kearsarge* (LHD 3) and the 22nd Marine Expeditionary Unit conducted noncombatant evacuations of more than 1,200 American citizens and designated third-country nationals from Sierra Leone.



Exercise *BALTOPS '97*
Baltic Sea
June 1997
USS *Cape St. George* (CG 71), USS *Anzio* (CG 68) and USS *Estocin* (FFG 15) joined 47 other ships from 12 European nations in the largest Partnership for Peace exercise ever conducted.

Operation *Silver Wake*
Albania
March-June 1997
USS *Nassau* (LHA 4), USS *Pensacola* (LSD 38), USS *Nashville* (LPD 13) and elements of the 26th Marine Expeditionary Unit rescued 889 people, including 400 Americans, from continuing civil strife and provided additional security to the Embassy in the Albanian capital.

Operation Southern Watch
Arabian Gulf
August 1995 - present
Coalition enforcement of the no-fly zone in southern Iraq. Escalating tensions in November caused USS *George Washington* (CVN 73) carrier battle group to join USS *Nimitz* (CVN 68) in the Gulf.

Maritime Interception Ops
Arabian Gulf
August 1990 - present
U.S. Navy ships continue to enforce U.N. sanctions against Iraqi imports/exports.

Exercise *CARAT '97*
Southeast Asia
May 1997
Units of the 7th Fleet trained with the navies and marines from Malaysia, Brunei, Thailand and Singapore during *Cooperation Afloat Readiness and Training '97.*

Operation *Pacific Haven*
Guam
September 1996 - April 1997
6,600 Kurdish refugees began their lives in America via Operation *Pacific Haven*. Navy involvement included medical and dental specialists, Seabees, and logistic experts.

Exercise *Tandem Thrust '97*
Australia
March 1997
28,170 troops, 252 aircraft and 43 ships from the U.S. 7th Fleet and Australian Defense Force participated in carrier battle group and amphibious ready group operations, amphibious landings, live fire exercises, ground maneuvers and parachute landings.

Operation *Guardian Retrieval*
Zaire/Congo
May-August 1997
USS *Kearsarge* (LHD 3) and elements of the 22nd Marine Expeditionary Unit began their six-month deployment two weeks early to relieve USS *Nassau* (LHA 4) off the West African coast.

1997

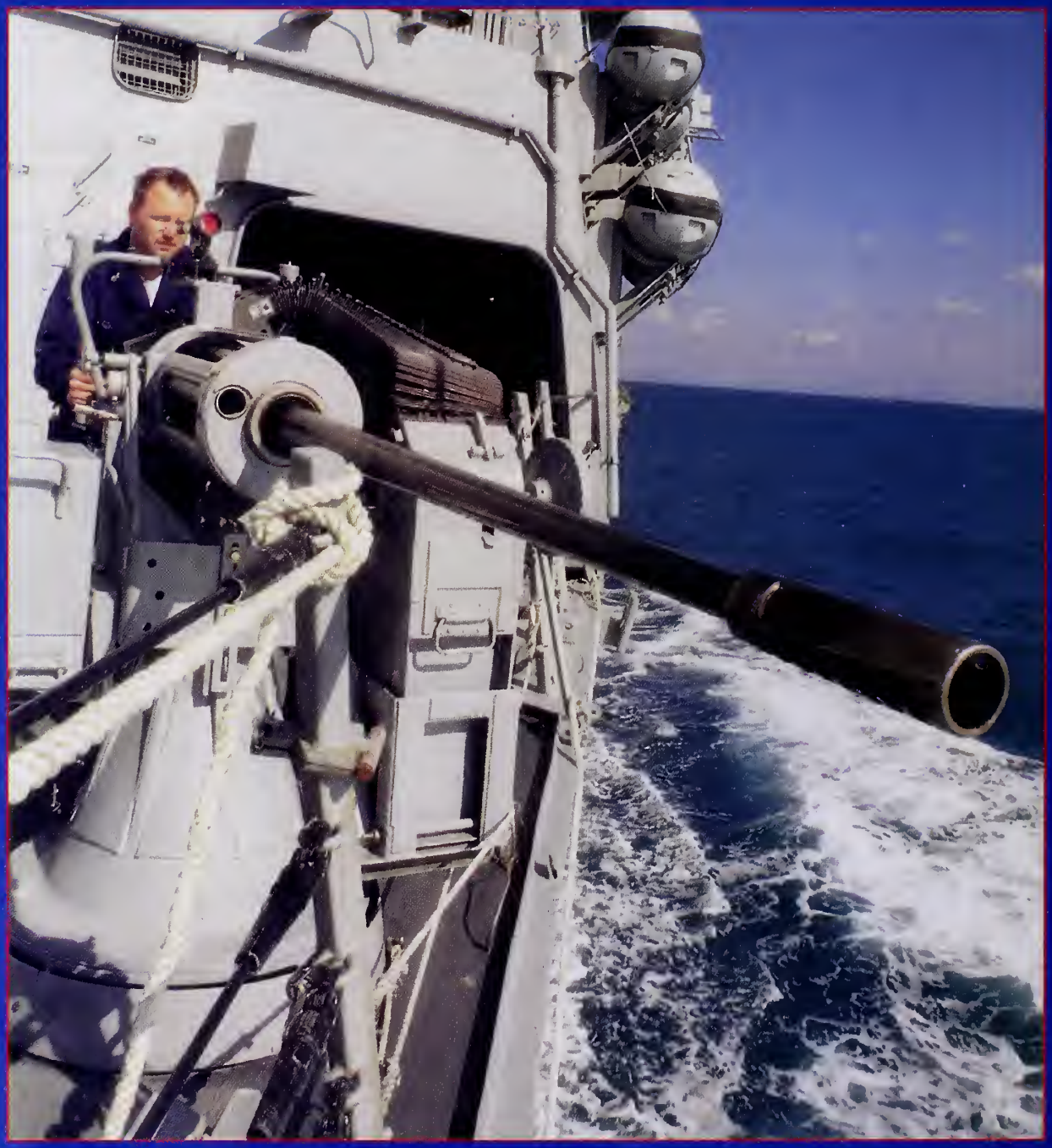


Photo by PH2 Rebecca Kearns

▲ November 21 — On board the destroyer USS *Benfold* (DDG 65) operating in the Northern Persian Gulf, GMG1 Joe Brown, from Arlington, Texas, handles a 25mm chain gun while on watch. The ship, home ported in San Diego, was deployed with USS *Nimitz* (CVN 68) battle group under the U.S. Navy's 5th Fleet. *Benfold* was conducting Multinational Maritime Interception Operations as part of the U.N. sanctions against Iraq.



Photo by PH2 Andrew Mckaskle

▲ February 15 — AO1(DV) David Ahearn attaches an inert satchel charge to a training mine during exercises in waters off Naval Base Guantanamo Bay, Cuba.

▼ November 16 — On board the nuclear-powered aircraft carrier USS *Nimitz* (CVN 68), AC Buccie Cline from Humphrey, Ariz., monitors final control positions of pilots during aircraft recovery operations in the North Arabian Gulf. *Nimitz* and its embarked air wing were operating in the Gulf to enforce U.N. sanctions against Iraq.



Photo by PHAN Benjamin F. Story



Photo by PH1 Todd P. Cichonowicz

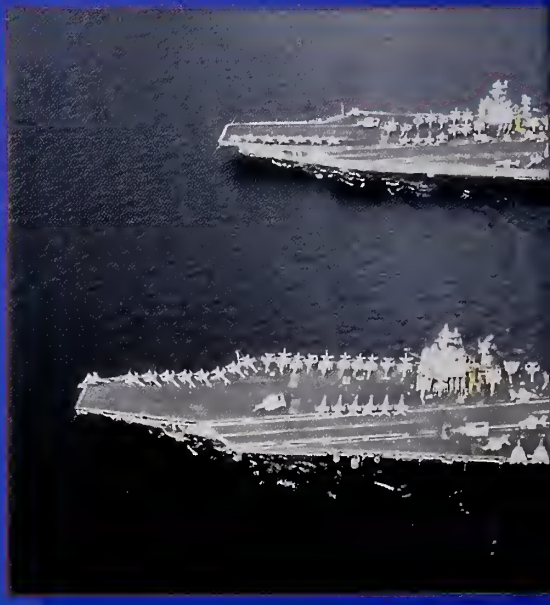
◄ July 28 — U.S. Navy SEALs exit a CH-53E *Sea Stallion* during a training exercise in Bosnia.



Photo by PHC John E. Gay



Photo by AR Adam Plantz



▲ January 18 — The U.S. Navy's newest Strike Fighter, the F/A-18E/F *Super Hornet*, makes a final approach to the flight deck of the aircraft carrier USS *John C. Stennis* (CVN 74), during the aircraft's initial sea trials.



◄ August 3 — Personnel man the underway main control watch aboard the Navy's newest nuclear-powered submarine USS *Seawolf* (SSN 21). *Seawolf* uses the latest technology in submarine warfare making it the fastest, most versatile submarine in the U.S. undersea arsenal. The boat was commissioned July 19, 1997.



Photo by PH2 Wes Cheney

◄ May 30 — A child clings to a U.S. Navy Sailor after a frightening first ride in a helicopter. She was among the first of 200 children evacuated to the Amphibious Assault Ship USS *Kearsarge* (LHD 3) from Freetown, Sierra Leone, during operation *Noble Obelisk*.



Photo by PH2 Robert Catalano



Photo by PH3 Michael A. Meyers

◄ August 6, Guam — U.S. Navy, Air Force, Coast Guard and civilian rescuers remove a survivor from the wreckage of Korean Airlines Flight 801.

◄ November 23 — The aircraft carrier USS *Nimitz* (CVN 68) (bottom) comes alongside the carrier USS *George Washington* (CVN 73) in the Arabian Gulf. With both carriers and their embarked air wings in the region, the United States had approximately 100 strike aircraft operating independently in the waters of the Arabian Gulf.

2002



Photo by PHC John E. Gay

▲ July 20 — USS *Constitution*, "Old Ironsides," is framed by a life ring aboard the destroyer USS *Ramage* (DDG 61). *Ramage* provided escort for the Navy's oldest commissioned war ship while tugs aided in her transit to Marblehead, Mass. Commissioned Oct. 21, 1797, Old Ironsides set sail unassisted July 21 for the first time in 116 years.



Photo by PH2 Felix Garza Jr.

▲ March 23, San Diego — U.S. Navy and Chinese Sailors compare uniform insignias on board the frigate USS *Rentz* (FFG 46). This marks the first time Chinese warships have crossed the Pacific and visited the continental United States.

▼ June 29 — On board the nuclear-powered aircraft carrier USS *Nimitz* (CVN 68) in the Eastern Pacific Ocean, AS3 Susana Lomeli, of Pomona, Calif., performs a quick engine change on an AS32-21 tow tractor.



Photo by PH2 James Watson

▼ November 16 — The *Ticonderoga*-class cruiser USS *Normandy* (CG 60) (front), the nuclear-powered, fast-attack submarine USS *Annapolis* (SSN 760) (center) and the fast combat support ship USS *Seattle* (AOE 3) transitted the Suez Canal. All three U.S. ships were part of USS *George Washington's* (CVN 73) battle group which joined USS *Nimitz's* battle group already on station. Both will enforce U.N. sanctions against Iraq by patrolling the No-Fly Zone under Operation *Southern Watch.*



Photo by PHAN Jason Dent



Photo by PHAN Glenn Cook

◄ November 27 — ET3 Class David Fox (left) from Ukiah, Calif., and IC2 Jefferson Richardson from Knoxville, Tenn., enjoy a traditional Thanksgiving dinner on board the aircraft carrier USS *Nimitz* (CVN 68). *Nimitz* and its air wing were deployed to the Arabian Gulf in support of U.N. sanctions against Iraq under Operation *Southern Watch.*

CVN 77

CVN 77 is one of the Navy's newest platforms where the latest automation and technologies for design, manufacturing and support of aircraft carriers are being integrated. Several concepts, such as the one depicted here, are being considered. Here's a bird's-eye view of some of the key areas:

Concept of Operations (CONOPS) — Ensures total combat effectiveness, flight deck sortie rate and Joint Task Force (JTF) operation requirements.

Systems Engineering — Provides a strategy-to-task-to-technology approach to integrate total ship systems' engineering processes.

Life Cycle Cost (LCC) — Investigates all aspects of platform costs to ensuring best value in true construction through maintenance costs.

Automation — Increases manning efficiency and safety while reducing life cycle costs and modernizing the Fleet.

Combat Systems — Has new technologies and integrates ship and aircraft systems necessary for naval ships of the future.

Network Centric Warfare — Inserts information technology shipwide and ensures complete joint interoperablility needs are met.

Aircraft Launch and Recovery Equipment (ALRE) — Investigates new technologies as they apply to the launch and recovery of aircraft.

Propulsion — Incorporates ship plant technologies with the latest innovation in performance, weight, volume and power generation.

Signatures — Concentrates on signature reduction design of the superstructure, hull and the island house.

Commercialization — Monitors the marketplace for the best commercial products, commercial-off-the-shelf (COTS) conversion and construction techniques.

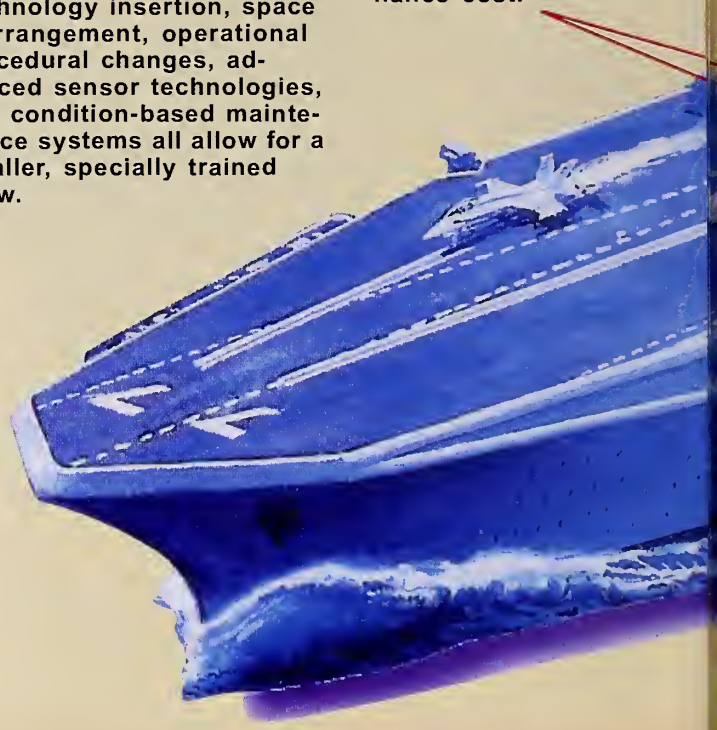
Artwork for this page and the front cover were provided by Newport News Shipbuilding.



Innovative ideas are being incorporated from the start in the design of CVN 77.

Passive Jet Blast Deflector
Redesigns and new materials mean reduced maintenance cost.

Manpower Reductions
Technology insertion, space rearrangement, operational procedural changes, advanced sensor technologies, and condition-based maintenance systems all allow for a smaller, specially trained crew.



Expanded Bandwidth
More onboard and offboard capability gives the ship a communications edge.

Zonal Electrical Distribution Systems
Isolate the potential for problems and minimize the effect on the rest of the ship.

Innovative Thinking



CVN 77 will incorporate cost savings and automation, as well as stealth, perhaps in a more traditional single island design.

Signature Reduction
Curved flight deck edges, enclosed antenna farms, smaller islands and internal aircraft elevators add up to maximum stealth.

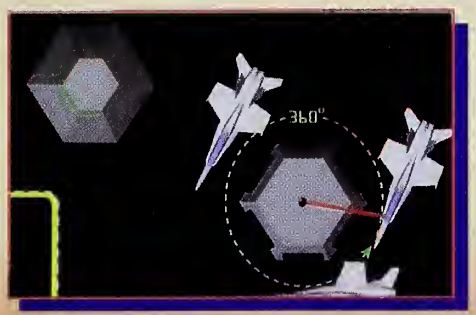
Island Designs
Improve flight deck access and reduce signature and electronic self-interference.

Aircraft Pit Stop
Semi-automated refueling and servicing in a new configuration and deck location provides faster, more efficient airwing pit stops and requires fewer people.

Hangar Bay
New designs reduce clutter.

Parts Standardization and Reduction
The simpler the better.

Reconfigurable Spaces
Life-of-the-ship modular construction designs provide flexibility and reduce cost.



A more revolutionary design approach to CVN 77 would split aircraft and ship operation functions between two islands, incorporate a "pit stop" for aircraft and rearrange elevator placement.

Automation Insertion
Material movement devices, semi-autonomous, gravity compensated weapons handling devices, damage control automation systems and components will reduce the ship's crew and cost.



Hot Link

To learn more about CVN 77 check out this web site:
http://www.nns.com/ten5a1_cvn_smart.htm



Photo by PH2 Matthew J. Magee

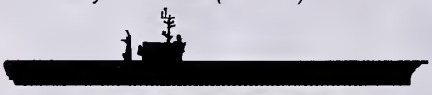
Aircraft Carriers

The aircraft carrier continues to be the centerpiece of the forces necessary for forward presence. Whenever there has been a crisis, the first question has been: "Where are the carriers?" Carriers support and operate aircraft that engage in attacks on airborne, afloat and ashore targets that threaten free use of the sea. They can respond to global crises in ways ranging from peacetime presence to full scale war. Together with their on board air wings, the carriers have vital roles across the full spectrum of conflict.



***Nimitz*-class**

USS *Nimitz (CVN 68)*
USS *Dwight D. Eisenhower (CVN 69)*
USS *Carl Vinson (CVN 70)*
USS *Theodore Roosevelt (CVN 71)*
USS *Abraham Lincoln (CVN 72)*
USS *George Washington (CVN 73)*
USS *John C. Stennis (CVN 74)*
PCU *Harry S. Truman (CVN 75)*



***John F. Kennedy*-class**

USS *John F. Kennedy* (CV 67)



***Enterprise*-class**

USS *Enterprise* (CVN 65)



***Kitty Hawk*-class**

USS *Kitty Hawk* (CV 63)
USS *Constellation* (CV 64)



***Forrestal*-class**

USS *Independence* (CV 62)



Photo by Robert Catalano

Cruisers

Modern U.S. Navy guided-missile cruisers perform primarily in a battle force role. These ships are multi-mission (anti-air, anti-surface, anti-submarine) surface combatants capable of supporting carrier battle groups, amphibious forces or of operating independently and as flagships of surface action groups.



***Ticonderoga*-class**

USS *Ticonderoga* (CG 47)
USS *Yorktown* (CG 48)
USS *Vincennes* (CG 49)
USS *Valley Forge* (CG 50)
USS *Thomas S. Gates* (CG 51)
USS *Bunker Hill* (CG 52)
USS *Mobile Bay* (CG 53)
USS *Antietam* (CG 54)
USS *Leyte Gulf* (CG 55)
USS *San Jacinto* (CG 56)
USS *Lake Champlain* (CG 57)
USS *Philippine Sea* (CG 58)
USS *Princeton* (CG 59)
USS *Normandy* (CG 60)
USS *Monterey* (CG 61)
USS *Chancellorsville* (CG 62)
USS *Cowpens* (CG 63)
USS *Gettysburg* (CG 64)
USS *Chosin* (CG 65)
USS *Hue City* (CG 66)
USS *Shiloh* (CG 67)
USS *Anzio* (CG 68)
USS *Vicksburg* (CG 69)
USS *Lake Erie* (CG 70)
USS *Cape St. George* (CG 71)
USS *Vella Gulf* (CG 72)
USS *Port Royal* (CG 73)



***California*-class**

USS *California* (CGN 36)
USS *South Carolina* (CGN 37)

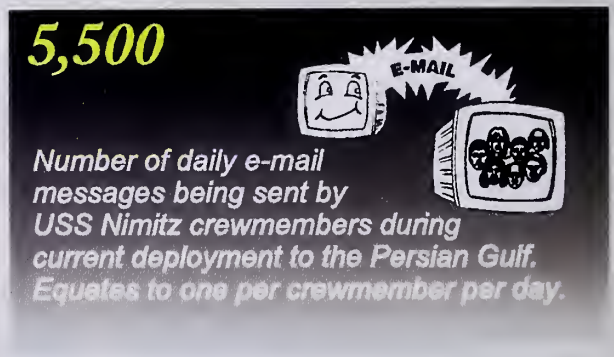
Frigates

Guided-missile frigates (FFG) bring an anti-air warfare (AW) capability to the table. Designed as cost-efficient surface combatants, the FFG 7 class is a robust platform, capable of withstanding considerable damage.



***Oliver Hazard Perry*-class**

USS *McInerney* (FFG 8)
USS *Wadsworth* (FFG 9)
USS *Clark* (FFG 11)
USS *George Philip* (FFG 12)
USS *Samuel Eliot Morison* (FFG 13)
USS *Sides* (FFG 14)
USS *Estocin* (FFG 15)
USS *John A. Moore* (FFG 19)
USS *Fahrion* (FFG 22)
USS *Lewis B. Puller* (FFG 23)
USS *Boone* (FFG 28)
USS *Stephen W. Groves* (FFG 29)
USS *Reid* (FFG 30)
USS *Stark* (FFG 31)
USS *John L. Hall* (FFG 32)
USS *Jarrett* (FFG 33)
USS *Aubrey Fitch* (FFG 34)
USS *Underwood* (FFG 36)
USS *Crommelin* (FFG 37)
USS *Curts* (FFG 38)
USS *Doyle* (FFG 39)
USS *Halyburton* (FFG 40)
USS *McClusky* (FFG 41)
USS *Klakring* (FFG 42)
USS *Thach* (FFG 43)
USS *Dewert* (FFG 45)
USS *Rentz* (FFG 46)
USS *Nicholas* (FFG 47)



USS *Vandegrift* (FFG 48)
USS *Bradley* (FFG 49)
USS *Taylor* (FFG 50)
USS *Gary* (FFG 51)
USS *Carr* (FFG 52)
USS *Hawes* (FFG 53)
USS *Ford* (FFG 54)
USS *Elrod* (FFG 55)
USS *Simpson* (FFG 56)
USS *Reuben James* (FFG 57)
USS *Samuel B. Roberts* (FFG 58)
USS *Kauffman* (FFG 59)
USS *Rodney M. Davis* (FFG 60)
USS *Ingraham* (FFG 61)



U.S. Navy Photo

Destroyers

Destroyers and guided-missile destroyers operate in support of carrier battle groups, surface action groups, amphibious groups and replenishment groups. Destroyers primarily perform anti-submarine warfare duty while guided-missile destroyers are multi-mission (anti-submarine, anti-air and anti-surface warfare) surface combatants.



***Arleigh Burke*-class**

USS *Arleigh Burke* (DDG 51)
USS *Barry* (DDG 52)
USS *John Paul Jones* (DDG 53)
USS *Curtis Wilbur* (DDG 54)
USS *Stout* (DDG 55)
USS *John S. McCain* (DDG 56)
USS *Mitscher* (DDG 57)
USS *Laboon* (DDG 58)
USS *Russell* (DDG 59)
USS *Paul Hamilton* (DDG 60)
USS *Ramage* (DDG 61)
USS *Fitzgerald* (DDG 62)
USS *Stethem* (DDG 63)
USS *Carney* (DDG 64)
USS *Benfold* (DDG 65)
USS *Gonzalez* (DDG 66)
USS *Cole* (DDG 67)
USS *The Sullivans* (DDG 68)
USS *Milius* (DDG 69)
USS *Hopper* (DDG 70)
USS *Ross* (DDG 71)

Under Construction

Mahan (DDG 72)
Decatur (DDG 73)
McFaul (DDG 74)
Donald Cook (DDG 75)
Higgins (DDG 76)
O'Kane (DDG 77)
Porter (DDG 78)
Oscar Austin (DDG 79)
Roosevelt (DDG 80)
Winston Churchill (DDG 81)



***Kidd*-class**

USS *Kidd* (DDG 993)
USS *Callaghan* (DDG 994)
USS *Scott* (DDG 995)
USS *Chandler* (DDG 996)



***Spruance*-class**

USS *Spruance* (DD 963)
USS *Paul F. Foster* (DD 964)
USS *Kinkaid* (DD 965)
USS *Hewitt* (DD 966)
USS *Elliot* (DD 967)
USS *Arthur W. Radford* (DD 968)
USS *Peterson* (DD 969)
USS *Caron* (DD 970)
USS *David R. Ray* (DD 971)
USS *Oldendorf* (DD 972)
USS *John Young* (DD 973)
USS *Comte De Grasse* (DD 974)
USS *O'Brien* (DD 975)
USS *Merrill* (DD 976)
USS *Briscoe* (DD 977)
USS *Stump* (DD 978)
USS *Conolly* (DD 979)
USS *Moosbrugger* (DD 980)
USS *John Hancock* (DD 981)
USS *Nicholson* (DD 982)
USS *John Rodgers* (DD 983)
USS *Leftwich* (DD 984)
USS *Cushing* (DD 985)
USS *Harry W. Hill* (DD 986)
USS *O'Bannon* (DD 987)
USS *Thorn* (DD 988)
USS *Deyo* (DD 989)
USS *Ingersoll* (DD 990)
USS *Fife* (DD 991)
USS *Fletcher* (DD 992)
USS *Hayler* (DD 997)

Amphibious Warfare Ships

Modern U.S. Navy amphibious assault ships are called upon to perform as primary landing ships for assault operations of Marine expeditionary units. In a secondary role, using AV-8B *Harrier* aircraft and anti-submarine warfare helicopters, these ships perform sea control and limited power projection missions.

Assault Ships

Transport and land assault forces ashore by use of Landing Craft Air Cushion (LCAC), conventional landing craft, and helicopters.



***Wasp*-class**

USS *Wasp* (LHD 1)
USS *Essex* (LHD 2)
USS *Kearsarge* (LHD 3)
USS *Boxer* (LHD 4)
USS *Bataan* (LHD 5)

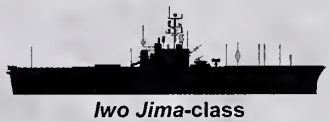
Under Construction

Bon Homme Richard (LHD 6)



***Tarawa*-class**

USS *Tarawa* (LHA 1)
USS *Saipan* (LHA 2)
USS *Belleau Wood* (LHA 3)
USS *Nassau* (LHA 4)
USS *Peleliu* (LHA 5)



***Iwo Jima*-class**

USS *Guam* (LPH 9)
USS *New Orleans* (LPH 11)



U.S. Navy Photo

Amphibious Command

Command ships provide communications and accommodations for fleet commanders and staff. Ships are equipped with air and surface radars, helicopters, chaff launchers an electronic warfare suite and helicopters capabilities. These ships were converted from amphibious warfare ships for employment as command ships.



***Blue Ridge*-class**

USS *Blue Ridge* (LCC 19)
USS *Mount Whitney* (LCC 20)



***LaSalle & Coronado*-class**

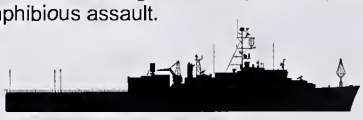
USS *La Salle* (AGF 3)
USS *Coronado* (AGF 11)



Photo by PH2 (NAC) Jeff Viano

Amphibious Transport Dock

Amphibious transport dock ships are used to transport and land Marines, their equipment and supplies by embarked landing craft or amphibious vehicles augmented by helicopters in amphibious assault.



***Austin*-class**

USS *Austin* (LPD 4)
USS *Ogden* (LPD 5)
USS *Duluth* (LPD 6)
USS *Cleveland* (LPD 7)
USS *Dubuque* (LPD 8)
USS *Denver* (LPD 9)
USS *Juneau* (LPD 10)
USS *Shreveport* (LPD 12)
USS *Nashville* (LPD 13)

Under Construction
San Antonio (LPD 17) amphibious transport dock ship.

Dock Landing

Support amphibious operations on a hostile shore via Landing Craft Air Cushion (LCAC), conventional landing craft and helicopters.



***Harpers Ferry*-class**

USS *Harpers Ferry* (LSD 49)
USS *Carter Hall* (LSD 50)
USS *Oak Hill* (LSD 51)

Under Construction
Pearl Harbor (LSD 52)



***Whidbey Island*-class**

USS *Whidbey Island* (LSD 41)
USS *Germantown* (LSD 42)
USS *Fort McHenry* (LSD 43)
USS *Gunston Hall* (LSD 44)
USS *Comstock* (LSD 45)
USS *Tortuga* (LSD 46)
USS *Rushmore* (LSD 47)
USS *Ashland* (LSD 48)



***Anchorage*-class**

USS *Anchorage* (LSD 36)
USS *Portland* (LSD 37)
USS *Pensacola* (LSD 38)
USS *Mount Vernon* (LSD 39)
USS *Fort Fisher* (LSD 40)

Tank Landing

Tank landing ships (LST) are used to transport and land tanks, amphibious vehicles and other rolling stock in amphibious assault.The two ships of this class, now assigned to the Naval Reserve Forces, are the only of this 20-ship class of LSTs remaining in the fleet.



***Newport*-class**

USS *Frederick* (LST 1184)
USS *La Moure County* (LST 1194)



Photo by Electric Boat Corp.

Attack Submarines

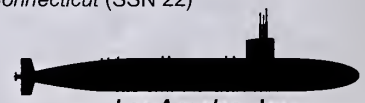
Attack submarines are designed to seek and destroy enemy submarines and surface ships. Their other missions range from intelligence collection and special forces delivery to antiship and strike warfare. It is a multimission vessel, capable of deploying to forward ocean areas to search out and destroy enemy submarines and surface ships and to fire missiles in support of other forces.



***Seawolf*-class**

USS *Seawolf* (SSN 21)

Under Construction
Connecticut (SSN 22)



***Los Angeles*-class**

USS *Los Angeles* (SSN 688)
USS *Philadelphia* (SSN 690)
USS *Memphis* (SSN 691)



USS *Indianapolis* (SSN 697)
USS *Bremerton* (SSN 698)
USS *Jacksonville* (SSN 699)
USS *Dallas* (SSN 700)
USS *La Jolla* (SSN 701)
USS *Phoenix* (SSN 702)
USS *Boston* (SSN 703)
USS *Baltimore* (SSN 704)
USS *City of Corpus Christi* (SSN 705)
USS *Albuquerque* (SSN 706)
USS *Portsmouth* (SSN 707)
USS *Minneapolis St. Paul* (SSN 708)
USS *Hyman G. Rickover* (SSN 709)
USS *Augusta* (SSN 710)
USS *San Francisco* (SSN 711)
USS *Atlanta* (SSN 712)
USS *Houston* (SSN 713)
USS *Norfolk* (SSN 714)
USS *Buffalo* (SSN 715)
USS *Salt Lake City* (SSN 716)
USS *Olympia* (SSN 717)
USS *Honolulu* (SSN 718)
USS *Providence* (SSN 719)
USS *Pittsburgh* (SSN 720)
USS *Chicago* (SSN 721)
USS *Key West* (SSN 722)
USS *Oklahoma City* (SSN 723)
USS *Louisville* (SSN 724)
USS *Helena* (SSN 725)
USS *Newport News* (SSN 750)
USS *San Juan* (SSN 751)
USS *Pasadena* (SSN 752)
USS *Albany* (SSN 753)

USS *Topeka* (SSN 754)
USS *Miami* (SSN 755)
USS *Scranton* (SSN 756)
USS *Alexandria* (SSN 757)
USS *Asheville* (SSN 758)
USS *Jefferson City* (SSN 759)
USS *Annapolis* (SSN 760)
USS *Springfield* (SSN 761)
USS *Columbus* (SSN 762)
USS *Santa Fe* (SSN 763)
USS *Boise* (SSN 764)
USS *Monpelier* (SSN 765)
USS *Charlotte* (SSN 766)
USS *Hampton* (SSN 767)
USS *Hartford* (SSN 768)
USS *Toledo* (SSN 769)



Photo by Michael J. Rinaldi

USS *Tucson* (SSN 770)
USS *Columbia* (SSN 771)
USS *Greeneville* (SSN 772)
USS *Cheyenne* (SSN 773)

***Narwhal*-class**

USS *Narwhal* (SSN 671)



***Sturgeon*-class**

USS *Pogy* (SSN 647)
USS *Sand Lance* (SSN 660)
USS *Hawkbill* (SSN 666)
USS *Pintado* (SSN 672)
USS *Trepang* (SSN 674)
USS *Billfish* (SSN 676)
USS *Archerfish* (SSN 678)
USS *William H. Bates* (SSN 680)
USS *Batfish* (SSN 681)
USS *Tunny* (SSN 682)
USS *Parche* (SSN 683)
USS *Cavalla* (SSN 684)
USS *L. Mendel Rivers* (SSN 686)

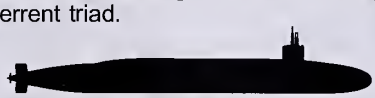


***Benjamin Franklin*-class**

USS *Kamehameha* (SSN 642)
USS *James K. Polk* (SSN 645)

Ballistic Missile Submarines

Among the Navy's highest priority programs, ballistic missile submarines are the cornerstone of the national security policy, functioning as the most survivable and enduring leg of the strategic deterrent triad.



***Ohio*-class**

USS *Ohio* (SSBN 726)
USS *Michigan* (SSBN 727)
USS *Florida* (SSBN 728)
USS *Georgia* (SSBN 729)
USS *Henry M.Jackson* (SSBN 730)
USS *Alabama* (SSBN 731)
USS *Alaska* (SSBN 732)
USS *Nevada* (SSBN 733)
USS *Tennessee*, (SSBN 734)
USS *Pennsylvania* (SSBN 735)
USS *West Virginia* (SSBN 736)
USS *Kentucky* (SSBN 737)
USS *Maryland* (SSBN 738)
USS *Nebraska* (SSBN 739)
USS *Rhode Island* (SSBN 740)
USS *Maine* (SSBN 741)
USS *Wyoming* (SSBN 742)
USS *Louisiana* (SSBN 743)

Tenders

Submarine tenders are the largest of the active auxiliaries. Their crews are made up mostly of technicians and repair personnel. The *L. Y. Spear*-class is designed and fitted to accommodate attack submarines and can service up to four submarines moored alongside simultaneously. The *Simon Lake*-class is configured especially to service ballistic missile submarines.



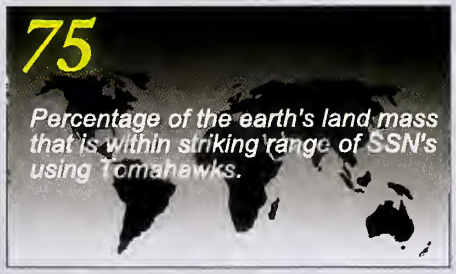
***L.Y. Spear*-class**

USS *Emory S. Land* (AS 39)
USS *Frank Cable* (AS 40)
USS *McKee* (AS 41)



***Simon Lake*-class**

USS *Simon Lake* (AS 33)



Mine Warfare Ships

In the early 1980s, the Navy began developing a new mine countermeasures (MCM) force that included two new classes of ships and minesweeping helicopters.



***Inchon*-class**

USS *Inchon* (MCS 12)

Mine Countermeasures

USS *Inchon* was converted to a command and control ship to support an embarked composite helicopter squadron of eight CH-53E and two SAR/spotter helicopters, and provide alongside support and services for up to four MCM/MHC ships.



***Avenger*-class**

USS *Avenger* (MCM 1)
USS *Defender* (MCM 2)
USS *Sentry* (MCM 3)
USS *Champion* (MCM 4)
USS *Guardian* (MCM 5)
USS *Devastator* (MCM 6)
USS *Patriot* (MCM 7)
USS *Scout* (MCM 8)
USS *Pioneer* (MCM 9)
USS *Warrior* (MCM 10)
USS *Gladiator* (MCM 11)
USS *Ardent* (MCM 12)
USS *Dextrous* (MCM 13)
USS *Chief* (MCM 14)

Minehunters Coastal

Osprey-class (MHC 51)ships are mine hunter-killers capable of finding, classifying and destroying moored and bottom mines.



***Osprey*-class**

USS *Osprey* (MHC 51)
USS *Heron* (MHC 52)
USS *Pelican* (MHC 53)
USS *Robin* (MHC 54)
USS *Oriole* (MHC 55)
USS *Kingfisher* (MHC 56)
USS *Cormorant* (MHC 57)
USS *Black Hawk* (MHC 58)
USS *Falcon* (MHC 59)
USS *Cardinal* (MHC 60)

Under Construction
Raven (MHC 61)
Shrike (MHC 62)

Coastal Patrol

Primarily provides coastal protection and interdiction. Also provides Naval Special Warfare Support, including long-range SEAL insertion/extraction and tactical swimmer operations.



***Cyclone*-class**

USS *Cyclone* (PC 1)
USS *Tempest* (PC 2)
USS *Hurricane* (PC 3)
USS *Monsoon* (PC 4)
USS *Typhoon* (PC 5)
USS *Sirocco* (PC 6)
USS *Squall* (PC 7)
USS *Zephyr* (PC 8)
USS *Chinook* (PC 9)
USS *Firebolt* (PC 10)
USS *Whirlwind* (PC 11)
USS *Thunderbolt* (PC 12)
USS *Shamal* (PC 13)

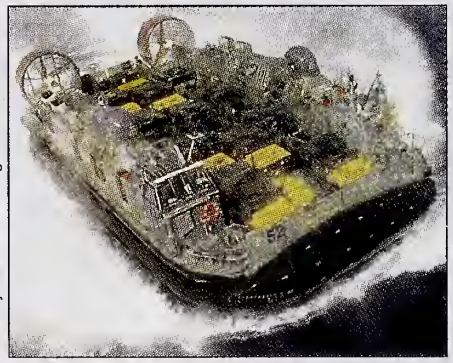


Photo by PH2 Michael Degner

Landing Craft Air Cushion (LCAC)

Transporting weapons systems, equipment, cargo, and personnel of the assault elements of the Marine Air/Ground Task Force from both ship to shore and across the beach, the landing craft air cushion (LCAC) is a high-speed, over-the-beach fully-amphibious landing craft capable of carrying a 60- to 75-ton payload. The advantages of air-cushion landing craft are numerous and they can carry heavy payloads, such as an M-1 tank, at high speeds.

Fleet Support Ships

Provide repair, salvage and a variety of other types of support to the combatant fleet.

Rescue, Salvage & Towing

The mission of the rescue and salvage ships is four-fold: debeach stranded vessels, heavy lift capability from ocean depths, towing of other vessels and manned diving operations. For rescue missions, these ships are equipped with fire monitors forward and amidships which can deliver either firefighting foam or sea water.



***Safeguard*-class**

USS *Safeguard* (ARS 50)
USS *Grasp* (ARS 51)
USS *Salvor* (ARS 52)
USS *Grapple* (ARS 53)

Mobile Combat Logistics Force

Provide fuel, provisions and ammunition to combatant ships at sea via underway and vertical replenishment. These ships are an integral part of carrier battle groups as fuel, ammunition and stores reservoirs.

Fast Combat Support

The fast combat support ship (AOE) is the Navy's largest combat logistics ship. The AOE has the speed and armament to keep up with the carrier battle groups.



***Sacramento* & *Supply*-classes**

***Supply*-class**

USS *Supply* (AOE 6)
USS *Rainer* (AOE 7)
USS *Arctic* (AOE 8)

Under Construction
Bridge (AOE 10)

***Sacramento*-class**

USS *Sacramento* (AOE 1)
USS *Camden* (AOE 2)
USS *Seattle* (AOE 3)
USS *Detroit* (AOE 40)



PH3 Chris Vickers

Fleet Oiler

Transport bulk petroleum and lubricants from depots to underway battle group station ships, as well as combatants and support forces by alongside and vertical replenishment.



***Cimarron*-class**

USS *Cimarron* (AO 177)
USS *Monongahela* (AO 178)
USS *Merrimack* (AO 179)
USS *Willamette* (AO 180)
USS *Platte* (AO 186)

Ammunition

Ammunition ships keep the fleet supplied with ammunition and ordnance, independently or with other combat logistic ships. Ammunition is delivered by slings on ship-to-ship cables and by helicopters.

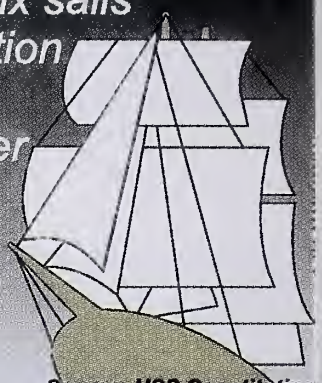


***Kilauea*-class**

USS *Santa Barbara* (AE 28)
USS *Mount Hood* (AE 29)

11,943

Total square footage of the six sails used to power USS Constitution 21 July 1997. The sails generated 169.88 horsepower or about the same amount as a moderately powered outboard engine



Source: USS Constitution

Military Sealift Command

The Military Sealift Command (MSC) maintains a fleet of ships which provides a variety of unique support missions to the fleet and other military services. These ships are primarily crewed by civilians with a contingent of U.S. Navy personnel.

Missile Range Instrumentation

USNS *Observation Island* operates worldwide, monitoring foreign missile tests for the Air Force Intelligence command. This ship carries the Air Force's *Cobra Judy* phased-array radar.



USNS *Observation Island* (T-AGM 23)

Ammunition

Ammunition ships keep the fleet supplied with ammunition and ordnance, independently or with other combat logistic ships. Ammunition is delivered by slings on ship-to-ship cables, and by helicopters.



Kilauea-class

USNS *Kilauea* (T-AE 26)
USNS *Butte* (T-AE 27)
USNS *Flint* (T-AE 32)
USNS *Shasta* (T-AE 33)
USNS *Mount Baker* (T-AE 34)
USNS *Kiska* (T-AE 35)

Combat Stores

Combat Stores Ships are capable of underway replenishment using tensioned cargo rigs and UH-46 *Sea Knight* helicopters. Combat Stores Ships carry refrigerated stores, dry provisions, technical spares, general stores, fleet freight and mail.



***Mars*-class**

USNS *Mars* (T-AFS 1)
USNS *Niagara Falls* (T-AFS 3)
USNS *Concord* (T-AFS 5)
USNS *San Diego* (T-AFS 6)
USNS *San Jose* (T-AFS 7)
USNS *Sirius* (T-AFS 8)
USNS *Spica* (T-AFS 9)
USNS *Saturn* (T-AFS 10)



Photo by PH2 Felix Garcia Jr.

Hospital Ships

The hospital ships (T-AH) provide emergency, on-site surgical and medical care to U.S. deployed forces in wartime or a contingency. The two hospital ships are part of the Military Sealift Command's Strategic Sealift Force. Each ship contains 1,000 hospital beds, 12 operating rooms, radiological services, medical laboratories, an optometry lab, a pharmacy and two oxygen producing plants.



***Mercy*-class**

USNS *Mercy* (T-AH 19)
USNS *Comfort* (T-AH 20)

Cable Repair

The Cable Repair Ship performs maintenance on the Sound Surveillance System (SOSUS), a network of strategically placed sonar sensors that provide early warning of submarines.



USNS *Zeus* (T-ARC 7)



Photo by JO2 Todd Stevens

Fast Sealift

Fast Sealift Ships feature a roll-on/roll-off (RO/RO) capability, specializing in the transport of wheeled or tracked vehicles. Stern ramps allow quick discharge of vehicles to a pier or dock.



***Algol*-class**

USNS *Algol* (T-AKR 287)
USNS *Bellatrix* (T-AKR 288)
USNS *Denebola* (T-AKR 289)
USNS *Pollux* (T-AKR 290)
USNS *Altair* (T-AKR 291)
USNS *Regulus* (T-AKR 292)
USNS *Capella* (T-AKR 293)
USNS *Antares* (T-AKR 294)
USNS *Shughart* (T-AKR 295)
USNS *Gordon* (T-AKR 296)
USNS *Yano* (T-AKR 297)
USNS *Gillilland* (T-AKR 298)

Oceanographic Ships

Designed specifically for oceanographic survey operations for the U.S. Navy. These ships operate under the control of the Oceanographer of the Navy and technical control is provided by the Naval Oceanographic Office. These ships have precision control and maneuverability options, including bow propulsion units, which also can be used for station keeping.



***Silas Bent*-class**

USNS *Silas Bent* (T-AGS 26)
USNS *Kane* (T-AGS 27)
USNS *Waters* (T-AGS 45)
USNS *John McDonnell* (T-AGS 51)
USNS *Littlehales* (T-AGS 52)
USNS *Pathfinder* (T-AGS 60)
USNS *Sumner* (T-AGS 61)
USNS *Bowditch* (T-AGS 62)
USNS *Henson* (T-AGS 63)

Fleet Oilers

Fleet oilers operate as a unit of an underway replenishment group, replenishing petroleum products and ordnance to the fleet at sea during underway replenishments (UNREPS).



***Henry J. Kaiser*-class**

USNS *Henry J. Kaiser* (T-AO 187)
USNS *Walter S. Diehl* (T-AO 193)
USNS *John Ericsson* (T-AO 194)
USNS *Leroy Grumman* (T-AO 195)
USNS *Kanawha* (T-AO 196)
USNS *Pecos* (T-AO 197)
USNS *Big Horn* (T-AO 198)
USNS *Tippecanoe* (T-AO 199)
USNS *Guadalupe* (T-AO 200)
USNS *Patuxent* (T-AO 201)
USNS *Yukon* (T-AO 202)
USNS *Laramie* (T-AO 203)
USNS *Rappahannock* (T-AO 204)

LPD 17

The bottom line for any amphibious ship is the transport, landing and support of Marine Corps expeditionary forces. How successful these ships are in fulfilling this mission and adapting to an ever-changing world can be determined by design.

The LPD 17 program incorporates the full-range of ship design expertise and goes one step beyond. "Design for Ownership" is a basic precept for the new ship class. This philosophy means involving the Navy and Marine Corps operators, maintainers and trainers in the design process from the very start. What's to be gained? A significant increase in quality and cost efficiency for one. For another, familiarization and acceptance is greater when a ship joins the fleet because the process has been going on for years. The more familiar the ship, the greater the chances are to fully realize its potential.

Christened *San Antonio*, the first of 12 LPD 17-class ships, is expected to be delivered to the Navy in 2002. As the numbers increase, this class will replace 41 ships of the LPD 4, LSD 36, LKA 113 and LST 1179-classes. To accomplish this, the new ships must be truly multipurpose and capable of supporting the evolving role of the Marine Corps into the 21st century.

Statistics:

Length: 684 ft.
Beam: 105 ft.
Draft: 23.0 ft.
Displacement: 25,300 tons
Speed: 22+ knots
Builder: Avondale Industries, Inc., Bath Iron Works, General Dynamics, Hughes Aircraft Co. and Intergraph Corp.
Cost: About $641 million





Designed as a multipurpose ship, LPD 17 will be capable of supporting the ever-changing role of the Marine Corps in the 21st century.

21st Century Gator



Art courtesy of Avondale Industries



Warfare Capability: Meets all stated operational requirements.
Mission Flexiblity: Readily adaptable to the full range of Navy-Marine Corps, Joint Service and NATO expeditionary warfare missions.
Technical Adaptability: Designed for rapid, affordable performance upgrades throughout the life of the ship.
Supportability: Reliable, maintainable and affordable throughout the life of the ship.



Hot link

To learn more about LPD 17 check out this web site: http://lpd17.nswc.navy.mil/lpd17/index.html

Air-to-Air Missiles



U.S. Navy photo

An F/A-18 *Hornet* aircraft fires the *Sidewinder* missile.

Sidewinder

Primary mission: All-weather, heat-seeking, short-range, dogfight missile; can be used day or night; and hones in on the engine exhaust of target aircraft. **Dimensions:** length – 9 ft., 4.2 in.; diameter – 5 in.; weight – 188 lbs. **Range:** 10,000 to 20,000 yards. **Payload:** annular blast fragmentation; weight – 20.8 lbs.

Sparrow

Primary mission: Highly maneuverable, radar-guided missile, with all-weather capability; can attack high-performance aircraft and missiles from any direction. **Dimensions:** length – 12 ft.; diameter – 8 in.; weight – 510 lbs. **Range:** more than 30 nautical miles. **Payload:** blast fragment, high explosive.

Phoenix

Primary mission: All-weather, long-range missile, carried in clusters, up to six missiles on the F-14; provides near simultaneous launch against multiple air targets. **Dimensions:** length – 13 ft.; diameter – 15 in.; weight – 989 lbs. **Range:** more than 104 nautical miles. **Payload:** proximity fuse, high-explosive; weight – 135 lbs.

AMRAAM

Primary mission: All-weather, radar-guided beyond-visual range missile; provides launch and leave capability and multiple target engagement capability. **Dimensions:** length – 11 ft., 9 in.; diameter – 7 in.; weight – 300 lbs. **Range:** 39 nautical miles. **Payload:** blast high explosive.

Cruise Missiles



U.S. Navy photo

Aviation ordnancemen prepare to load *Sparrow* air-to-air missiles.



U.S. Navy photo

A submarine launches a *Trident* missile.

Harpoon

Primary mission: All-weather, over-the-horizon, anti-ship missile; capable of being launched from surface ships, submarines or from aircraft to destroy surface combatants, submarines or other shipping. **Dimensions:** length – 15 ft., surface/submarine launched; 12 ft., 7 in. air launched; diameter – missile body, 13.5 in., **Payload:** 500 lbs. high explosive, blast penetrator.

Tomahawk Cruise Missile

Primary mission: Long-range, subsonic cruise missile; conventionally armed for anti-surface warfare; conventionally or nuclear-armed in land attack versions. **Dimensions:** length – 18 ft., 3 in.; diameter – 20.4 in. **Payload:** 1,000 lb. conventional submunitions dispenser with combined effect bomblets. Nuclear – W-80 warhead.

Fleet Ballistic Missiles

Trident II (D-5)

Primary mission: Subsurface to surface strategic nuclear deterrence. **Dimensions:** length – 44 ft.; diameter – 83 in.; weight – 126,000 lbs. **Range:** more than 6,000 nautical miles. **Payload:** Thermonuclear MIRV (Multiple Independent Re-entry Vehicle); Multiple Re-entry Vehicle (MRV) warhead.

Trident I (C-4)

Primary mission: Subsurface to surface strategic nuclear deterrence. **Dimensions:** length – 34 ft.; diameter – 74 in.; weight – 73,000 lbs. **Range:** 4,000 nautical miles. **Payload:** Thermonuclear MIRV with maneuverable warhead.



An artist's conception of the *SLAM-ER* being released from the *Super Hornet* aircraft.

SLAM-ER (Stand Off Land Attack Missile Expanded Response)

Primary mission: All-weather, intermediate-range with precision strike capability against land targets and ships in port, capable of being launched from land or from aircraft. **Dimensions:** length - 14ft. diameter - 13.5 in; weight - 1464 lbs. **Range:** more than 100 nautical miles. **Payload:** 500 lbs high explosive, blast fragmentation.

Air-to-Ground Missiles

HARM Missile

Primary mission: High-speed, anti-radiation missile; designed to seek out and destroy enemy radar-equipped air defense systems. **Dimensions:** length – 13 ft., 7 in., diameter – 10 in., weight – 798 lbs. **Range:** approximately 80 nautical miles. **Payload:** blast fragmentation.

Shrike Anti-radar Missile

Primary mission: The AGM-45 *Shrike* is designed to home in on anti-aircraft radars. **Dimensions:** length – 10 ft., diameter – 8 in.; weight – 390 lbs. **Range:** delivered by fighter aircraft, employs solid-fueled rocket. **Payload:** explosive blast warhead.



Artist's conception provided by Boeing Corp.

Surface-to-Air Missiles

Standard Missile Family

Primary mission: Engage and intercept aircraft, anti-ship missiles and surface ships. SM-1 MR, SM-2 MR **Dimensions:** length – 14 ft., 7 in.; diameter – 13.5 in.; weight – SM-1, 1,100 lbs.; SM-2, 1,380 lbs. **Payload:** proximity fuse, high explosive. SM-2 ER **Dimensions:** length – 26.2 ft.; diameter – 13.5 in.; weight – 2,980 lbs. **Payload:** proximity fuse, high explosive.

IR Maverick Missile

Primary mission: Forward fired, infrared-guided weapon; designed for day/night sea warfare and land interdiction. **Dimensions:** length – 8 ft. 2 in.; diameter – 12 in.; wing span – 2 ft., 4 in.; weight 675 lbs. **Range:** 12 nautical miles. **Payload:** 300 lb. penetrating/blast warhead.

Naval Guns

MK 15 Phalanx Close-in Weapons System (CIWS)

Primary mission: Fast-reaction, rapid-fire 20-millimeter gun system; provides defense against anti-ship missiles and hostile air targets at short range. **Dimensions:** weight – 12,500 lbs.; magazine capacity – 1,500 rounds of 20 mm ammunition. **Features:** Fires 3,000 - 4,500 rounds per minute.

MK 75, 76mm/.62 Caliber Gun System

Primary mission: Provides frigates and other combatants with a fast-reaction, lightweight gun; counters aircraft, cruise missiles and surface ships. **Features:** an enclosed naval gun mount, single barrel, remote-controlled, rapid-fire capability.

5-inch/.54 Caliber Lightweight Gun

Primary mission: Fires at a rate of 16 to 20 rounds per minute; provides surface combatants with accurate naval gunfire against fast, highly maneuverable surface targets, air threats and shore targets.

Torpedoes

MK 48 and MK 48 Advanced Capability (AdCap) Torpedo

Primary mission: Subsurface to subsurface and subsurface to surface. **Dimensions:** length – 19 ft.; diameter – 21 in.; weight – 3,520 lbs., (MK 48 AdCap – 3,695 lbs.). **Range:** 23 miles; depth – more than 1,200 ft. **Guidance:** wire-guided active and/or passive homing. **Payload:** 650 lbs. high-explosive warhead.

MK 50 Torpedo

Primary mission: Surface and air to sub-surface. **Dimensions:** length – 9.5 ft.; diameter – 12.75 in.; weight – 800 lbs. **Guidance:** active/passive acoustic homing.

MK 46 Torpedo

Primary mission: Launched from surface combatant torpedo tubes, ASROC missile and fixed and rotary wing aircraft. **Dimensions:** length – 8.5 ft.; diameter – 12.75 in., weight – 508 lbs. **Guidance:** 2 different modes – active or passive/active homing. **Payload:** 98 lbs. of PBXN-103 high explosive.



U.S. Navy photo

Aviation ordnancemen prepare to hang an AGM-65 *Maverick* missile on an F-14 *Tomcat* staged on board USS *Carl Vinson* (CVN 70).



U.S. Navy photo

FC3 Sean Staruch uploads ammunition into an MK15 *Phalanx* Close-In Weapon System aboard USS *George Washington* (CVN 73).



U.S. Navy photo

MK 46 torpedo.

NSSN A Futu

Representing a revolution in cost-effective design and construction techniques and mission flexibility, the new attack submarine (NSSN) will provide the U.S. Navy with the capabilities it requires to maintain the nation's undersea supremacy well into the 21st century.

The NSSN will satisfy the full spectrum of open ocean as well as regional and near-land missions. Equipped to wage multidimensional warfare, these submarines will be key to America's sea power and national defense with their stealth, lethality and unlimited endurance.

Now under design and scheduled for a 1998 construction start, NSSN is being optimized for maximum technological and operational flexibility. When the lead ship of the class joins the Navy's fleet in 2004, it will reflect the uncompromising quest to engineer the proper balance between advanced technologies and affordability.

Statistics:

Displacement:	7,800 tons
Length:	377 feet
Beam:	34 feet
Speed:	More than 25 knots
Depth:	More than 800 feet
Payload:	38 weapons, including Vertical Launching System and Special Operations Forces
Weapon Launch:	4 21-inch torpedo tubes, 12 Vertical Launching System tubes
Weapons:	*Tomahawk* land-attack missiles, *MK 48 Advanced Capability* torpedoes, advanced mobile mines and unmanned underwater vehicles.

Intelligence, Surveillance, Reconnaissance
NSSN has superior covert, non-provocative capabilities. Onboard imaging, acoustic and electronics sensor systems, unmanned vehicles and other off-board systems can continuously monitor the battlespace, allowing quick response to adversaries' moves.





Special Operations
NSSN will support the full spectrum of special operations missions — search and rescue, intelligence collection, sabotage and diversionary attacks; directing air strikes and other clandestine missions that demand a stealthy team of elite forces.

Warfare Pins and Badges



Naval Astronaut



Naval Astronaut (NFO)



Naval Aviator



Dirigible Pilot



Naval Aviation Observer and Flight Meteorologist



Naval Flight Surgeon



Naval Flight Nurse



Naval Flight Officer



Aviation Experimental Psychologist and Aviation Physiologist



Enlisted Aviation Warfare Specialist



Naval Aviation Supply Corps



Aircrew



Marine Combat Aircrew



Special Warfare



Special Operations



Surface Warfare (officer)



Enlisted Surface Warfare Specialist



Surface Warfare Nurse Corps



Surface Warfare Medical Corps



Surface Warfare Dental Corps



Surface Warfare Medical Service Corps



Surface Supply Corps



Submarine (officer)



Submarine (enlisted)



Submarine Medical



Submarine Engineering Duty



Submarine Supply



Submarine Combat Patrol



SSBN Deterrent Patrol (20 patrols)



SSBN Deterrent Patrol (12 patrols)



Seabee Combat Warfare Specialist (officer)



Seabee Combat Warfare Specialist (enlisted)



Naval Parachutist



Basic Parachutist



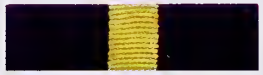
Naval Reserve

ORDER OF PRECEDENCE — U.S. NAVY


MEDAL OF HONOR


NAVY CROSS


DEFENSE DISTINGUISHED SERVICE MEDAL


DISTINGUISHED SERVICE MEDAL


SILVER STAR


DEFENSE SUPERIOR SERVICE MEDAL

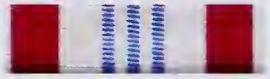

LEGION OF MERIT


DISTINGUISHED FLYING CROSS


NAVY AND MARINE CORPS MEDAL


BRONZE STAR


PURPLE HEART

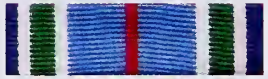

DEFENSE MERITORIOUS SERVICE MEDAL


MERITORIOUS SERVICE MEDAL

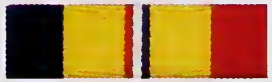

AIR MEDAL


JOINT SERVICE COMMENDATION MEDAL

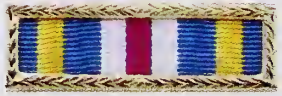

NAVY/MARINE CORPS COMMENDATION MEDAL


JOINT SERVICE ACHIEVEMENT MEDAL


NAVY/MARINE CORPS ACHIEVEMENT MEDAL


COMBAT ACTION RIBBON


PRESIDENTIAL UNIT CITATION

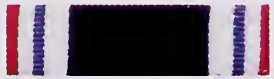

JOINT MERITORIOUS UNIT AWARD


NAVY UNIT COMMENDATION


MERITORIOUS UNIT COMMENDATION

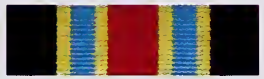


NAVY "E" RIBBON

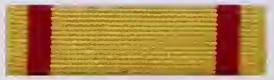

POW MEDAL


GOOD CONDUCT MEDAL


NAVAL RESERVE MERITORIOUS SERVICE MEDAL

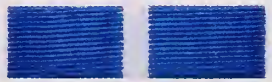

FLEET MARINE FORCE RIBBON


NAVY EXPEDITIONARY MEDAL

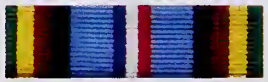

CHINA SERVICE MEDAL


NAVY OCCUPATION SERVICE MEDAL


NATIONAL DEFENSE SERVICE MEDAL


KOREAN SERVICE MEDAL

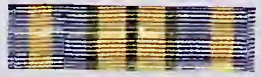

ANTARCTICA SERVICE MEDAL

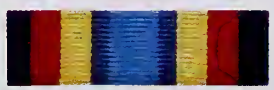

ARMED FORCES EXPEDITIONARY MEDAL


VIETNAM SERVICE MEDAL


SOUTHWEST ASIA SERVICE MEDAL


HUMANITARIAN SERVICE MEDAL


MILITARY OUTSTANDING VOLUNTEER SERVICE MEDAL


SEA SERVICE DEPLOYMENT RIBBON

NAVY ARCTIC SERVICE RIBBON

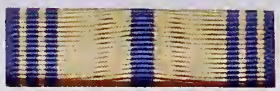
NAVAL RESERVE SEA SERVICE RIBBON



NAVY AND MARINE CORPS OVERSEAS SERVICE RIBBON



NAVY RECRUITING SERVICE RIBBON



ARMED FORCES RESERVE MEDAL



NAVAL RESERVE MEDAL



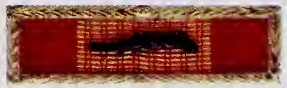
PHILIPPINE PRESIDENTIAL UNIT CITATION



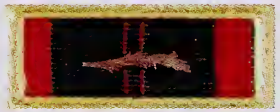
REPUBLIC OF KOREA PRESIDENTIAL UNIT CITATION



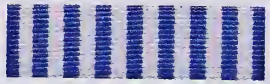
REPUBLIC OF VIETNAM PRESIDENTIAL UNIT CITATION



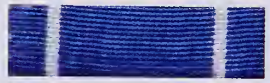
REPUBLIC OF VIETNAM GALLANTRY CROSS UNIT CITATION



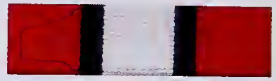
REPUBLIC OF VIETNAM CIVIL ACTIONS UNIT CITATION



UNITED NATIONS SERVICE MEDAL



UNITED NATIONS MEDAL



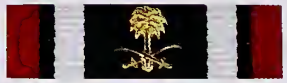
MULTINATIONAL FORCE AND OBSERVERS MEDAL



INTER-AMERICAN DEFENSE BOARD MEDAL



REPUBLIC OF VIETNAM CAMPAIGN MEDAL



KUWAIT LIBERATION MEDAL (Kingdom of Saudi Arabia)



KUWAIT LIBERATION MEDAL (KUWAIT)



EXPERT RIFLEMAN MEDAL



EXPERT PISTOL SHOT MEDAL

DEVICES



GOLD STAR
Denotes each subsequent award of the same Navy decoration.



SILVER STAR
Worn in the same manner as the gold star, in lieu of five gold stars.



BRONZE SERVICE STAR
Representsparticipation in campaigns or operations, multiple qualification or an additional award to any of the various ribbons on which it is authorized. Also worn to denote first award of the single mission Air Medal after Nov. 22,1989.



SILVER SERVICE STAR
Worn in the same manner as the bronze star, lieu of five bronze service stars.



BRONZE OAK LEAF CLUSTER
Represents second and subsequent entitlements of awards.



SILVER OAK LEAF CLUSTER
Worn for the sixth, 11th or in lieu of five bronze oak leaf cluster.



WINTERED OVER
For wintering over on the Antarctic continent, a clasp for Antarctica Service Medal, suspension ribbon and a disc for the service ribbon of bronze for first winter, gold for second winter, silver for third winter.



"V" DEVICE
Authorized foracts or service involving direct participation in combat operations.



HOURGLASS
Issued for each succeeding award of the Armed Forces Reserve Medal.



"O" DEVICE
U.S. Coast Guard device denoting performance under operational conditions.



EUROPE AND ASIA CLASPS
Worn on the suspension ribbon of the Navy Occupation Service Medal.



FLEET MARINE FORCE COMBAT OPERATIONS INSIGNIA
For Navy personnel attached to fleet Marine force units participating in combat operations.



"E" DEVICE
Worn on the Expert Rifleman and Expert Pistol Shot awards.



BRONZE "S"
Denotes Sharpshooter qualification.



STRIKE/FLIGHT DEVICE
Bronze arabic numeral denotes the total number of strike/flight awards of the Air Medal earned subsequent to April 9, 1962.



"M" DEVICE
Denotes Naval Reserve mobilization in support of certain operations.

"3/16" PALM
Worn on the Republic of Vietnam Gallantry Cross Unit Citation and Republic of Vietnam Civil Actions Unit Citation ribbons.



"E" WREATH
Denotes 4 or more Battle "E" awards.

The above display represents the correct order of precedence for ribbons most likely to be worn today on the Navy uniform.Devices worn on these ribbons must be worn in a specific manner and are used to denote additional awards or participation in a specific event. For additional information about the proper order of display, placement of devices or about ribbons not shown, refer to SECNAVINST 1650.1F and U.S. Navy Uniform Regulation (NAVPERS 1566.5G).

Warfare Pins and Badges



Integrated Undersea Surveillance System (officer)



Integrated Undersea Surveillance System (enlisted)



Master Explosive Ordnance Disposal



Senior Explosive Ordnance Disposal



Explosive Ordnance Disposal



Diving (officer)



Diving (medical)



Master Diver



Diver (medical technician)



First Class Diver



Second Class Diver



Scuba Diver



Deep Submergence (officer)



Deep Submergence (enlisted)



Presidential Service Badge



Vice Presidential Service Badge



Office of the Secretary of Defense



Joint Chiefs of Staff



Recruiting Command



Recruiting Command for Excellence



Recruiter



Career Counselor



Recruit Company Commander



Command-at-Sea



Command Ashore



Officer in Charge (Small Craft)



Petty Officer in Charge (Small Craft)



Craftmaster



Master Chief Petty Officer of the Navy



Force Master Chief Petty Officer



Fleet Master Chief Petty Officer



Master Chief Petty Officer of the Command



Senior Chief Petty Officer of the Command



Chief Petty Officer of the Command



U.S. Navy Police (officer)



U.S. Navy Security



U.S. Navy Corrections



U.S. Navy Police (enlisted)



U.S. Navy Guard



U.S Navy Master-at-Arms

re With Options

The Next Generation ... designed today!

NSSN meets America's requirement for multimission, flexible, combat-ready warships that can "walk softly and carry a big stick" well into the 21st century.



Modular Design

NSSN's equipment modules are constructed and tested off-hull. Each module's "independence" facilitates technology insertion into follow-on ships as well as technology upgrades later in the ship's life.



Hot link

To learn more about NSSN check out this web site: http://www.chinfo.navy.mil/navpalib/cno/n87/nssn.html

Navy Enlisted Ratings



AB
Aviation Boatswain's Mate
(used at pay grade E-9)
ABE (Launch and Recovery Equipment)
ABF (Fuels)
ABH (Aircraft Handling)



AG
Aerographer's Mate



AC
Air Traffic Controller



AK
Aviation Storekeeper



AD
Aviation Machinist's Mate
(Compressed with AM to become AFCM at pay grade E-9)



AM
Aviation Structural Mechanic
(used at pay grade E-8 only)
(Compressed with AD to become AFCM at pay grade E-9)
AME (Safety Equipment)
AMH (Hydraulics)
AMS (Structures)



Photo by JO1 Rodney Furry

▲ Signal flags are just one method SM1(AW) Phillip D. Avery can use to communicate between ships at sea. Signalmen maintain lookouts and must be proficient in visual communication to ensure the safety of the ship and crew.



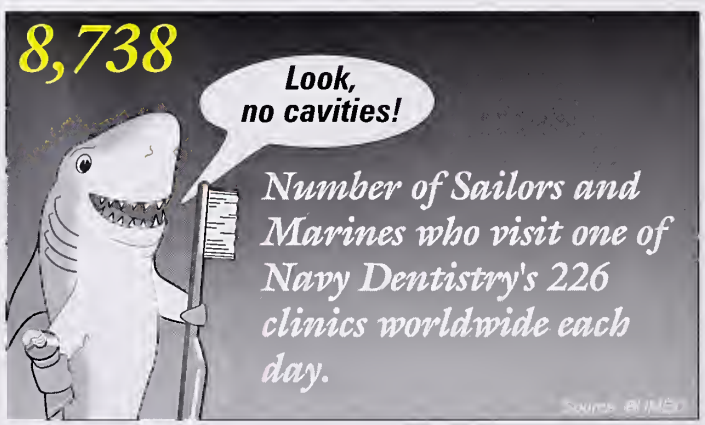
AS
Aviation Support Equipment Technician



AO
Aviation Ordnanceman



AE
Aviation Electrician's Mate
(Compressed with AT to become AVCM at pay grade E-9)





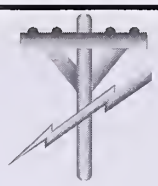
AT
Aviation Electronics Technician
(Compressed with AE to become AVCM at pay grade E-9)



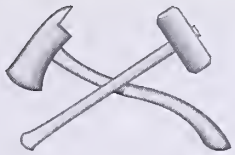
AW
Aviation Warfare Systems Operator



BM
Boatswain's Mate



CE
Construction Electrician
(becomes UCCM at pay grade E-9)



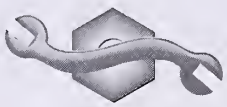
DC
Damage Controlman



AZ
Aviation Maintenance Administrationman



BU
Builder
(becomes CUCM at pay grade E-9)



CM
Construction Mechanic
(becomes EQCM at pay grade E-9)



DK
Disbursing Clerk



CT
Cryptologic Technician
CTA (Administrative)
CTI (Interpretive)
CTM (Maintenance)
CTO (Communications)
CTR (Collection)
CTT (Technical



DM
Illustrator Draftsman



U.S. Navy photo

▲ Dental technicians like DT3 Kimberly S. Combs of Shreveport, La., assist dentists with patient care, perform as X-ray technicians, make and fit dental prosthetics and work in clinical laboratories.



Photo by JO1 Rodney Furry

➤ The name says it all for machinist's mates. Like MM1(SS) John S. Hakala, Sailors in this rating are responsible for the operation of the various engines, compressors and air conditioning equipment aboard ship.

1.2 Million

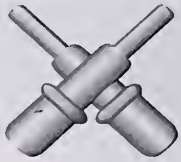
Number of eggs served for breakfast aboard USS John F. Kennedy during a recent six month deployment.



Source: USS John F. Kennedy



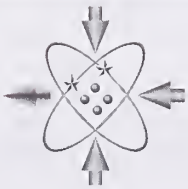
FC
Fire Controlman



GM
Gunner's Mate
(used at pay grade E-7 and above)
GMG (Guns)
GMM (Missiles)



FT
Fire Control Technician



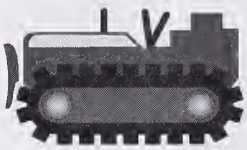
DS
Data Systems Technician



EN
Engineman



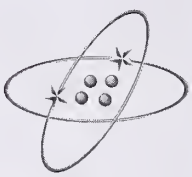
DT
Dental Technician



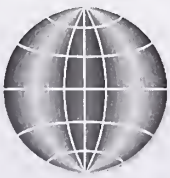
EO
Equipment Operator
(becomes EQCM at pay grade E-9)



EA
Engineering Aide
(becomes CUCM at pay grade E-9)



ET
Electronics Technician



EM
Electrician's Mate



EW
Electronic Warfare Technician

▼ Food preparation is what mess management specialists, like MS2(SS) Ronald R. Sturtz, are best known for. But they must also know how to manage the entire operation of a Navy dining facility or bachelor quarters.



Photo by JO1 Rodney Furry



Photo by AN Joe Hendricks

▲ GMGSN Harmony Wright of Grand Junction, Colo., inspects an M-14 rifle on board USS *Barry* (DDG 52). Gunner's mates are responsible for operating, maintaining and repairing the Navy's guns and guided-missile launching systems.

➤ Maintaining, testing and replacing aircraft engines are the duties of the aviation machinist's mate. AD3 Zandy Marsh of Wichita Falls, Texas, works on a J52P8C engine while deployed aboard USS *Enterprise* (CVN 65).

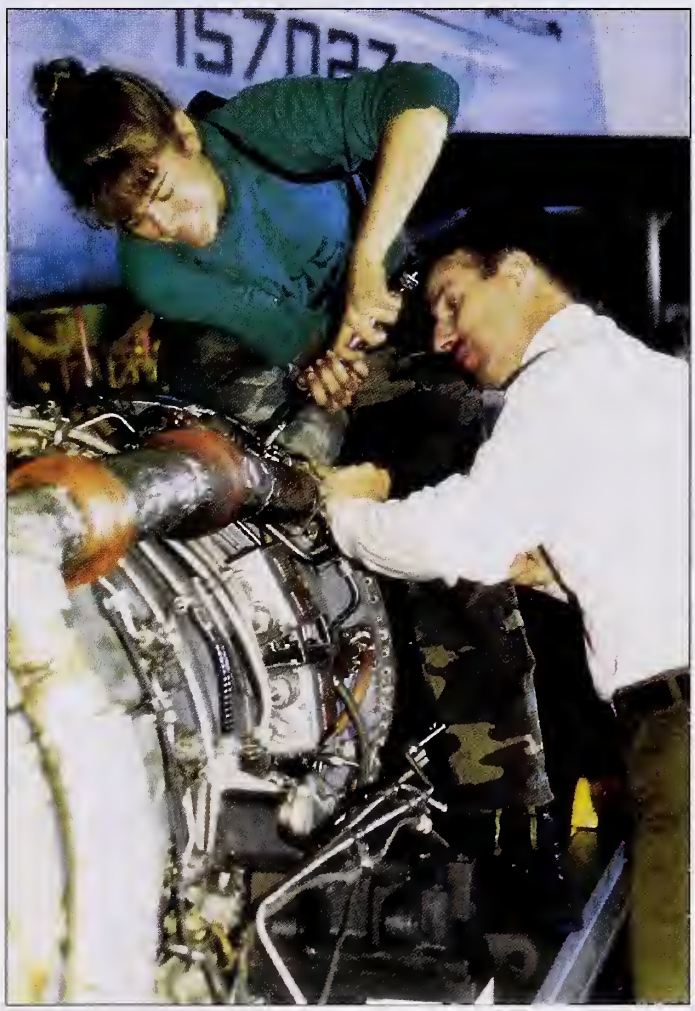


Photo by PH2 Matt Hostetler

IM
Instrumentman

JO
Journalist

LI
Lithographer

GS
Gas Turbine System Technician
(used at pay grade E-8 and E-9)

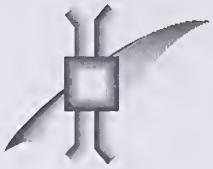
HM
Hospital Corpsman

IC
Interior Communications Electrician

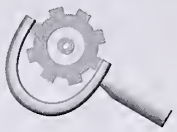
HT
Hull Maintenance Technician

IS
Intelligence Specialist

Navy Enlisted Ratings



LN
Legalman



MR
Machinery Repairman



Photo by AN Colin R. Koestler

➤ AMH3 Marco A. Reyes works on the hydraulic lines of an S-3B *Viking* aircraft. Aviation structural mechanics are trained in the maintenance and repair of aircraft exteriors, landing gear, hydraulic systems and safety equipment.



MA
Master-at Arms

➤ A torpedoman's mate does much more than maintain torpedo systems. As weapons experts they are called upon for other duties. TM2 Melton L. Ford of Greenville, Miss., takes over a .50-caliber gun mount aboard USS *Enterprise* (CVN 65).



MM
Machinist's Mate



MN
Mineman



MS
Mess Management Specialist

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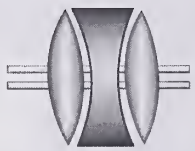
MT
Missile Technician



NC
Navy Counselor



MU
Musician



OM
Opticalman



Photo by PH3 Oscar Espinoza



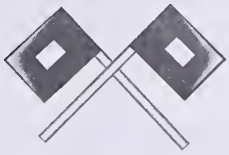
OS
Operation's Specialist



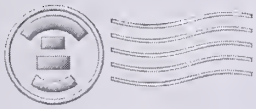
RM
Radioman



SH
Ship's Serviceman



SM
Signalman



PC
Postal Clerk



PH
Photographer's Mate



PN
Personnelman



PR
Aircrew Survival Equipmentman



Photo by PH2 John K. Sokolowski

▲ Aviation electronics technicians are responsible for trouble-shooting, maintaining and repairing many electronic systems aboard high-tech naval aircraft. Here, AT3 Gabrielle Hickman of Fighter Squadron (VF) 101, gives the thumbs-up during launch operations aboard USS *George Washington* (CVN 73).



ST
Sonar Technician
STG (Surface)
STS (Submarine)



SW
Steelworker
(becomes CUCM at pay grade E-9)



TM
Torpedoman's Mate



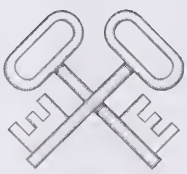
UT
Utilitiesman
(becomes UCCM at pay grade E-9)



QM
Quartermaster



RP
Religious Program Specialist



SK
Storekeeper



YN
Yeoman

Super Hornet

The *Super Hornet* is an all-weather, day and night, multimission strike fighter that is harder to find, harder to hit, and harder to disable.

Both the single-seat E and two-seat F models offer longer range, greater endurance, more payload-carrying capability, more powerful engines, increased carrier bring-back capability, enhanced survivability and a renewed potential for future growth.

The first production F/A-18E/F *Super Hornets* will enter service with the U.S. Navy in 1999. The first operational squadron of *Super Hornets* will be ready for deployment in 2001.

Statistics:

Primary Function: Multirole attack and fighter aircraft
Contractor: The Boeing Company
Unit Cost: $35 million
Propulsion: Two F414-GE-400 turbofan engines
Thrust: 22,000 pounds (9,977 kg) static thrust per engine
Length: 60.3 feet (18.5 meters)
Height: 16 feet (4.87 meters)
Maximum Take Off Gross Weight: 66,000 pounds (29,932 kg)
Wingspan: 44.9 feet (13.68 meters)
Ceiling: 50,000+ feet
Speed: Mach 1.8+
Crew: E model - One; F model - Two
Armament: One 20mm MK-61A1 *Vulcan* cannon
External payload: AIM 9 *Sidewinder*, AIM 7 *Sparrow*, AIM-120 *AMRAAM*, *Harpoon*, *HARM*, *Shrike*, SLAM, SLAM-ER, *Walleye*, *Maverick* missiles; Joint Stand-Off Weapon (JSOW); Joint Direct Attack Munition (JDAM); various general purpose bombs, mines and rockets.
First Flight: December 1995
First Carrier Landing: January 1997



Forward Cockpit



A/F Cockpit

90% Common F/A-18C/D Avionics

Avionics and software have a 90 percent commonality with current F/A-18C/Ds. However, the F/A-18E/F cockpit features a touch-sensitive, upfront control display; a larger, liquid crystal multipurpose color display; and a new engine fuel display.

34 in. Fuselage Extension

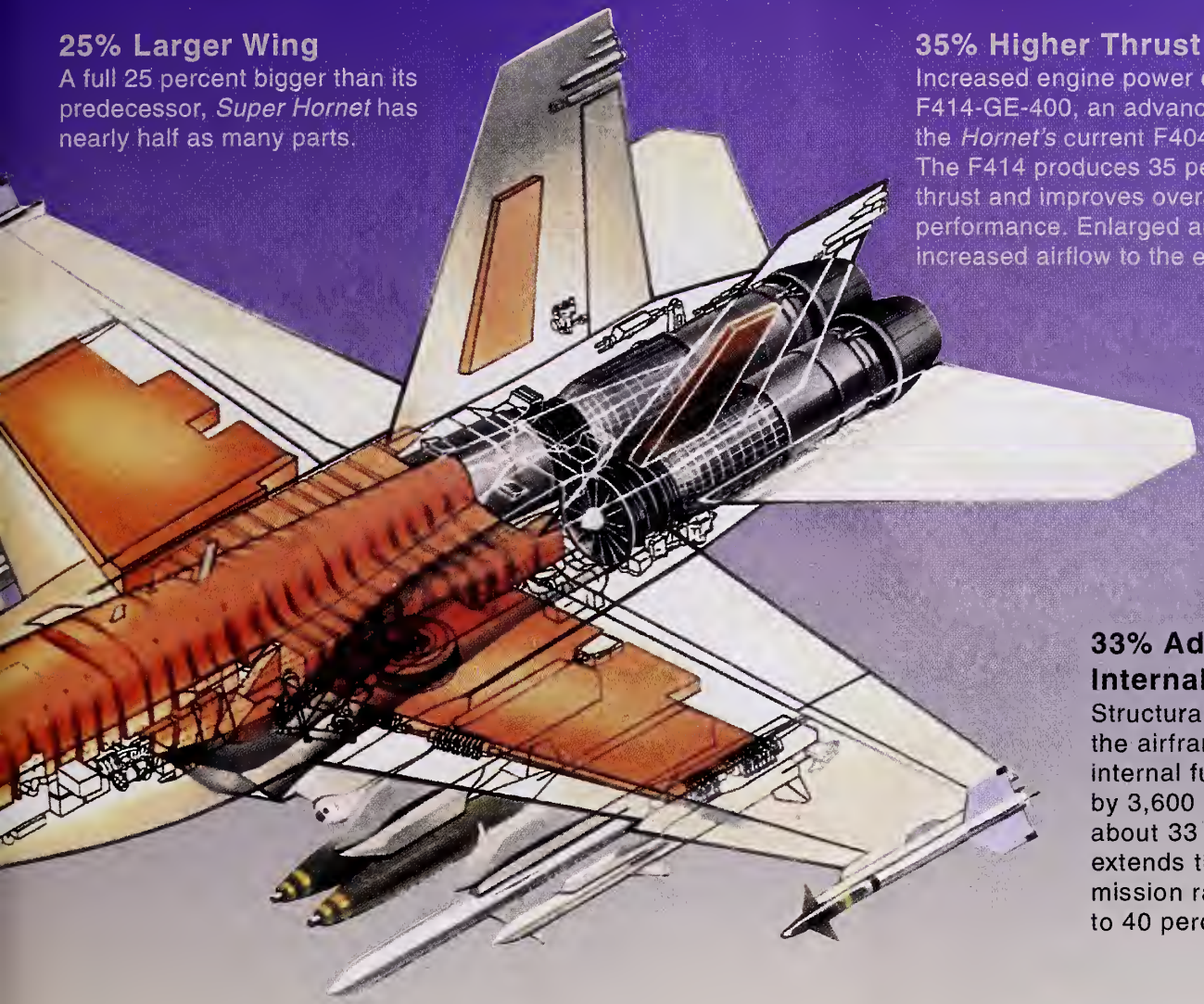
The fuselage is slightly longer — the result of a 34-inch extension.



Flying into the future

25% Larger Wing
A full 25 percent bigger than its predecessor, *Super Hornet* has nearly half as many parts.

35% Higher Thrust Engines
Increased engine power comes from the F414-GE-400, an advanced derivative of the *Hornet's* current F404 engine family. The F414 produces 35 percent more thrust and improves overall mission performance. Enlarged air inlets provide increased airflow to the engines.



33% Additional Internal Fuel
Structural changes to the airframe increase internal fuel capacity by 3,600 pounds, or about 33 percent. This extends the *Hornet's* mission radius by up to 40 percent.

Photos & art courtesy of McDonnell Aircraft & Missile Systems

Two Additional Multi-Mission Weapons Stations
Super Hornet has two additional weapons stations, bringing the total to 11. For aircraft carrier operations, about three times more payload can be brought back to the ship.





Hot link

To learn more about the *Super Hornet* check out this web site: http://www.navy.mil/navpalib/aircraft/fa18/shornet.html

Fighters, Bombers & Tactical Aircraft

F/A-18 *Hornet*

The F/A-18 *Hornet*, an all-weather aircraft, is used as an attack aircraft as well as a fighter. In its fighter mode, the F/A-18 is used primarily as a fighter escort and for fleet air defense; in its attack mode, it is used for force projection, interdiction and close and deep air support.



Wingspan:	37 ft., 6 inches
Length:	56 ft.
Height:	15 ft., 3.5 in.
Speed:	Mach 1.8+
Range:	2,073 miles
Armament:	20mm M-61A1 *Vulcan* cannon; *Sparrow III* missile (fighter); *Sidewinder* missile (fighter); Guided /conventional air-to-ground ordnance (attack); *Harpoon* & *HARM* missiles
Crew:	1 (A, C & E); 2 (B, D & F)



Photo by PH3 Williams J. Kipp Jr.

Navy squadrons

VFA-15 Valions
VFA-22 Fighting Redcocks
VFA-25 Fist of the Fleet
VFA-27 Royal Maces
VFA-37 Bulls
VFA-81 Sunliners
VFA-82 Marauders
VFA-83 Rampagers
VFA-86 Sidewinders
VFA-87 Golden Warriors
VFA-94 Mighty Shrikes
VFA-97 Warhawks
VFA-105 Gunslingers
VFA-106 Gladiators
VFA-113 Stingers
VFA-115 Eagles
VFA-131 Wildcats
VFA-132 Privateers
VFA-136 Knighthawks
VFA-137 Kestrels
VFA-146 Blue Diamonds
VFA-147 Argonauts
VFA-151 Fighting Vigilantes
VFA-192 World Famous Golden Dragons
VFA-195 Dambusters
VFA-203 Blue Dolphins
VFA-204 River Rattlers

Marine Corps squadrons

VMFA-112 Cowboys
VMFA-115 Silver Eagles
VMFA-122 Crusaders
VMFA-124 Whisling Death
VMFA-134 The Smoke
VMFA-142 Flying Gators
VMFA-212 Lancers
VMFA-232 Red Devils
VMFA-251 Thunderbolts
VMFA-312 Checker Boards
VMFA-314 Black Knights
VMFA-321 Hells Angels
VMFA-323 Death Rattlers
VMFA-332 Moonlighters

F-14 *Tomcat*

The F-14 *Tomcat* is a supersonic, twin-engine, variable sweep wing, fighter designed to attack and destroy enemy aircraft at night and in all weather conditions. The F-14 can track up to 24 targets simultaneously with its advance weapons control system and attack six with *Phoenix* AIM-54A missiles while continuing to scan the airspace.



Wingspan:	64 ft. (unswept); 38 ft. (swept)
Length:	61 ft., 8 inches
Height:	16 ft.
Speed:	Mach 2+
Range:	2,300 miles
Armament:	AIM-54s, AIM-7s and AIM-9s Air-to-ground ordnance; 20mm M-61A1 *Vulcan* cannon
Crew:	2

VF-2 Bounty Hunters
VF-11 Red Rippers
VF-14 Tophatters
VF-31 Tomcatters
VF-32 Swordsmen
VF-41 Black Aces
VF-101 Grim Reapers
VF-102 Diamondbacks
VF-103 Jolly Rogers
VF-143 Puking Dogs
VF-154 Black Knights
VF-201 Hunters
VF-211 Checkmates
VF-213 Black Lions

EA-6B *Prowler*

The EA-6B *Prowler* provides an umbrella of protection over strike aircraft and ships by jamming enemy radar, electronic data links and communications. It is a twin-engine, mid-wing aircraft designed for carrier and advanced base operations. The *Prowler* is a fully integrated electronic warfare system combining long-range, all-weather capabilities with advanced electronic countermeasures.





Photo by PH3 Joe Hendricks

Wingspan:	53 ft.
Length:	59 ft., 10 inches
Height:	16 ft., 3 inches
Speed:	610 mph
Range:	1,099 miles
Armament:	*HARM* missiles
Crew:	4

Navy squadrons

VAQ-129 Vikings
VAQ-130 Zappers
VAQ-131 Lancers
VAQ-132 Scorpions
VAQ-133 Wizards
VAQ-134 Garudas
VAQ-135 Black Ravens
VAQ-136 Gauntlets
VAQ-137 Rooks
VAQ-138 Yellowjackets
VAQ-139 Cougars
VAQ-140 Patriots
VAQ-141 Shadowhawks
VAQ-142 Gray Wolves
VAQ-209 Star Warriors

Marine Corps squadrons

VMAQ-1 Banshees
VMAQ-2 Panthers
VMAQ-3 Moondogs
VMAQ-4 Seahawks

S-3B *Viking*

The S-3B *Viking* is a jet aircraft used in the detection and attack of submarines and as an armed scout in the anti-surface role. Extremely versatile, the *Viking* is also equipped for tanking, mining and limited electronic surveillance. S-3B's high speed computer system processes information generated by acoustic and non-acoustic target sensor systems.



Wingspan:	68 ft., 8 inches
Length:	53 ft., 4 inches
Height:	22 ft., 9 inches
Speed:	518 mph
Range:	2,645 miles
Armament:	*Harpoon* missiles; rockets; mines;torpedoes;depth charges
Crew:	4

VS-21 Fighting Redtails
VS-22 Checkmates
VS-24 Scouts
VS-29 Dragonfires
VS-30 Diamond Cutters
VS-31 Top Cats
VS-32 Maulers
VS-33 Screwbirds
VS-35 Blue Wolves
VS-38 Red Griffins
VS-41 Shamrocks

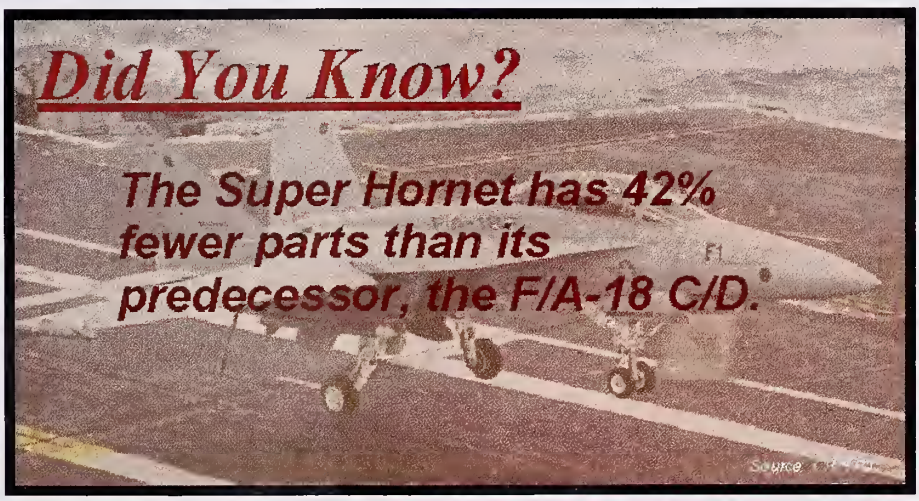
P-3C *Orion*

The P-3C *Orion* is a land-based, long range anti-submarine warfare (ASW) patrol aircraft. Using sonobuoys and magnetic anomaly detection equipment, the P-3C detects, identifies and destroys enemy submarines.



Wingspan:	99 ft., 8 in.
Length:	116 ft., 10 in.
Height:	33 ft., 8 inches
Speed:	473 mph
Range:	2,383 miles
Armament:	*Harpoon* missile; MK-46 torpedoes; mines, depth charges; sonobuoys
Crew:	4

VP-1 Screaming Eagles
VP-4 Skinny Dragons
VP-5 Mad Foxes
VP-8 Tigers
VP-9 Golden Eagles
VP-10 Red Lancers
VP-16 War Eagles
VP-26 Tridents
VP-30 Pro's Nest
VP-40 Fighting Marlins
VP-45 Pelicans
VP-46 Grey Knights
VP-47 Golden Swordsmen
VP-62 Broad Arrows
VP-64 The Condors
VP-65 Tridents
VP-66 The Liberty Bells
VP-69 Totems
VP-91 Black Cats
VP-92 Minutemen
VP-94 Crawfishers



Command & Control Aircraft

E-2C *Hawkeye*

The E-2C *Hawkeye* is the Navy's all-weather, carrier-based tactical warning and control system aircraft. It provides airborne early warning and command and control functions for the carrier battle group. Additional missions include surface surveillance coordination, strike and interceptor control, search and rescue guidance and communcations relay.



Wingspan:	80 ft., 7 in.
Length:	57 ft., 6 in.
Height:	18 ft., 4 in.
Speed:	389 mph
Range:	1,500 + miles
Armament:	None
Crew:	5

VAW-77 Night Wolves
VAW-78 Fighting Escargot
VAW-112 Golden Hawks
VAW-113 Black Eagles
VAW-115 Liberty Bells
VAW-116 Sun Kings
VAW-117 Wallbangers
VAW-120 Greyhawks

Photo by PH3 Chris Vickers



VAW-121 Bluetails
VAW-123 Screwtops
VAW-124 Bear Aces
VAW-125 Tigertails
VAW-126 Seahawks

E-6A *Mercury*

The E-6A *Mercury* provides secure, survivable, jam resistant strategic communications relay for fleet ballistic missile submarines. It performs the Navy's TACAMO ("Take Charge and Move Out") mission of linking ballistic missile forces with national command authority during time of crisis.



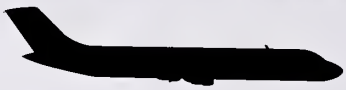
Wingspan:	148 ft., 4 inches
Length:	152 ft., 11 inches
Height:	42 ft., 5 inches
Speed:	610 mph
Range:	6,700 miles
Armament:	None
Crew:	14

VQ-3 Ironman
VQ-4 Shadows

Transport Aircraft

C-9B *Skytrain*

The C-9B *Skytrain* is used for fleet logistics support, intratheater airlift and airlifting Naval Reservists to and from training sites.



Wingspan:	93 ft., 3 in.
Length:	119 ft., 3 in.
Height:	27 ft., 5 in.
Speed:	565 mph
Range:	2,000 miles
Armament:	None
Crew:	8

VR-46 Eagles
VR-52 The Taskmasters
VR-56 Globemasters
VR-57 Conquistadores
VR-58 Sunseekers
VR-59 Lonestar Express

C-130 *Hercules*

The C-130 *Hercules*, a four-engine turboprop aircraft, is the workhorse of the military services. Besides hauling people and cargo, it plays a variety of other roles including gun-ships, weather watchers, tankers, firefighters and aerial ambulances.







Wingspan:	132 ft., 7 inches
Length:	97 ft., 9 inches
Height:	38 ft., 3 inches
Speed:	374 mph
Range:	2,350 miles w/ max. payload; 5,200 empty
Armament:	None; can be fitted with 7.62mm miniguns, 20mm *Vulcan* cannons, 40mm *Bofors* cannons and 105mm *Howitzer*
Crew:	5

VR-54 Revelers
VR-55 Minutemen
VR-62 Nor'easters



C-2A *Greyhound*

The C-2A *Greyhound* provides critical logistics support to aircraft carriers. Its primary mission is carrier on-board delivery. Powered by two T-6 turboprop engines, it can deliver a payload of up to 10,000 lbs.





U.S. Navy photo



U.S. Navy photo

Training Aircraft

T-45A *Goshawk*

The T-45A *Goshawk* is used for intermediate and advanced portions of the Navy pilot training program for jet carrier aviation and tactical strike missions.



Wingspan:	80 ft., 7 inches
Length:	56 ft., 10 inches
Height:	15 ft., 11 inches
Speed:	357 mph
Range:	1,796 miles
Armament:	None
Crew:	4

VRC-30 Providers
VRC-40 Rawhides

Wingspan:	30 ft., 10 inches
Length:	39 ft., 4 inches
Height:	14 ft.
Speed:	620 mph
Range:	1150 miles
Armament:	None
Crew:	2 (instructor, student)

VT-21 Redhawks
VT-22 Golden Eagles

Blue Angels 1998 Schedule

March

14	NAF El Centro, Calif.
21-22	Davis-Monthan AFB, Tuscon, Ariz.
28-29	NAS Kingsville, Texas

April

4-5	MCAS Beaufort, S.C.
18-19	Barksdale AFB, Bossier City, La.
25-26	NAS Norfolk

May

2-3	Ft. Lauderdale, Fla.
9-10	Chattanooga, Tenn.
16-17	Andrews AFB, Camp Springs, Md.
20	U.S. Naval Academy, Annapolis, Md.
24	NAS Meridian, Miss.
30-31	NAS/Joint Reserve Base Fort Worth, Texas



2,000 Number of autograph pens the Blue Angels go through

June

6-7	Coney Island, N.Y.
13-14	Eau Claire, Wis.
20-21	Grissom AFRB, Ind.
27-28	Niagara Falls, N.Y.

July

4-5	Traverse City, Mich.
11	Pensacola Beach, Fla.
18-19	Dayton, Ohio
25-26	Latrobe,Pa.

August

1-2	Hanscom AFB, Bedford, Mass.
8-9	Seattle
14-16	MCAS Miramar, Calif.
22-23	Chicago
29-30	Offutt AFB, Neb.

September

5-7	Chesterfield, Mo.
12-13	Halifax, Nova Scotia
19-20	Warner Robins AFB, Ga.
26-27	Reading, Pa.

October

3-4	Stockton, Calif.
10-11	San Francisco
17-18	Houston
24-25	NAS Jacksonville, Fla.
31	NAS/Joint Reserve Base New Orleans

November

1	NAS New Orleans
6-7	NAS Pensacola, Fla.



Helicopters

SH-60 *Seahawk*

The SH-60 *Seahawk* is a twin-engine helicopter used for anti-submarine warfare, search and rescue, drug interdiction, anti-ship warfare, cargo lift and special operations. It is an air platform based aboard cruisers, destroyers and frigates.



Length:	64 ft., 10 in.
Height:	17 ft.
Speed:	144 mph
Range:	380+ miles
Armament:	2 MK-46 torpedoes
Crew:	3

HS-2 Golden Falcons
HS-3 Tridents
HS-4 Black Knights
HS-5 Nightdippers
HS-6 Indians
HS-7 Shamrocks
HS-8 Eight-ballers
HS-10 War Hogs
HS-11 Dragonslayers
HS-14 Chargers
HS-15 Red Lions
HSC-4 Red Wolves
HSC-5 Firehawks
HSL-37 Easy Riders
HSL-40 Airwolves
HSL-41 Seahawks
HSL-42 Proud Warriors
HSL-43 Battle Cats
HSL-44 Swamp Fox
HSL-45 Wolfpack
HSL-46 Grandmasters
HSL-47 Saberhawks
HSL-48 Vipers
HSL-51 Warlords

CH-46 *Sea Knight*

The CH-46D *Sea Knight* is used by the Navy for shipboard delivery of cargo and personnel. Additional tasks such as combat support, search and rescue, aeromedic evacuation of casualties may be assigned.





Length:	46 ft.
Height:	17 ft.
Speed:	165 mph
Range:	132+ miles
Armament:	None
Crew:	4

Navy squadrons

HC-3 Pack-Rats
HC-5 Providers
HC-6 Chargers
HC-8 Dragon Whales
HC-11 Gunbearers

Marine Corps squadrons

HMM-161 Greyhawks
HMM-162 Golden Eagles
HMM-163 Ridgerunners
HMM-164 Knightriders
HMM-165 White Knights
HMM-166 Sea Elks
HMM-261 Raging Bulls
HMM-263 Thunder Eagles
HMM-264 Black Knights
HMM-266 Fighting Griffins
HMM-268 Red Dragons
HMM-364 Purple Foxes
HMM-365 Blue Knights
HMM-764 Moonlighters
HMT-204 White Knights

CH-53 *Sea Stallion*

The CH-53 *Sea Stallion* transports personnel, supplies and equipment in support of amphibious and shore operations. Other variants of CH-53 are the RH-53P and the MH53E, which are used for mine countermeasures.



Length:	67 ft., 5 in.
Height:	24 ft., 11 in.
Speed:	184 mph
Range:	665 miles
Armament:	None
Crew:	3

Navy squadron

HC-4 Black Stallions



Photo by PH2 James E. Perkins



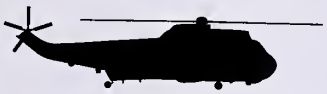
PH3 Williams J. Kipp, Jr.

Marine Corps squadrons

HMH-361 Flying Tigers
HMH-362 Ugly Angels
HMH-363 Red Lions
HMH-461 Iron Horses
HMH-462 Heavy Haulers
HMH-464 Condors
HMH-465 War Horses
HMH-466 Wolfpack
HMH-772 Hustlers
HMT-301 Windwalkers
HMT 302 Phoenix
HMT 303 Atlas

H-3H *Sea King*

The H-3H is a twin engine, all-weather helicopter used to detect, classify, track and destroy enemy submarines. It also provides logistic support and search and rescue capability. The UH-3H and VH-3 are configured for combat support roles.



Length:	54 ft., 9 in.
Height:	17 ft.
Speed:	136 mph
Range:	623 miles
Armament:	Two MK-46 torpedoes
Crew:	4

HC-2 Fleet Angels
HC-85 Golden Gators
HS-75 Emerald Knights

SH-2G *Seasprite*

The SH-2G *Seasprite* is a ship-based helicopter with anti-submarine, anti-surface threat capability, including over-the-horizon targeting. It extends and increases shipboard sensor and weapon capabilities against several types of enemy threats.



Length:	52 ft., 9 in.
Height:	15 ft.
Speed:	172.5 mph
Range:	391 miles
Armament:	Two MK-46/MK-50 torpedoes
Crew:	3

HSL-84 Thunderbolts
HSL-94 Titans

Joint Strike Fighter



Artist conceptions: provided by Boeing and Lockhead Martin (inset)

The carrier-based version of the JSF will provide first-day-of-the-war survivable strike capability, combined with outstanding low-speed flight handling characteristics. JSF will have a stronger internal structure, landing gear and arresting hook design for catapult launch and arrested landing.

- 24,000-pound class empty weight
- 36-foot wing span with no wing fold
- Internal & external payload capability
- Multirole supersonic aircraft

DD 21 A New

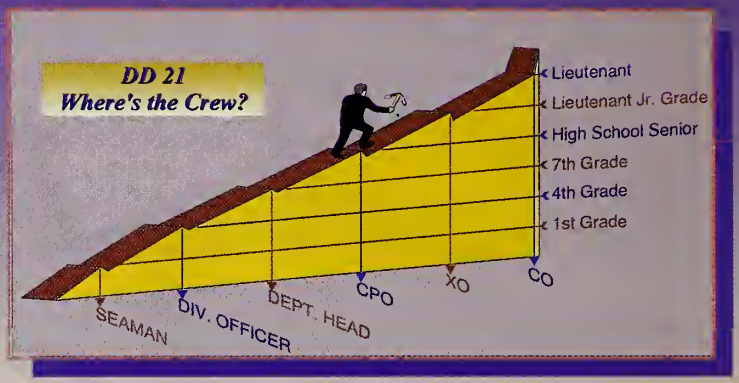
DD 21 is a ship being designed to conquer the technological challenges of the 21st century. Design characteristics such as submarine-like survivability and a significantly reduced radar signature, achieved through a fully integrated topside design, will significantly expand the mission of the surface combatant.

Like today's *Arleigh Burke*-class guided-missile destroyers, DD 21 will be a multi-mission ship, capable of providing forward presence and deterrence, and operating as a vital part of naval, joint and combined maritime forces to gain battlespace dominance in littoral operations. But unlike today's destroyers, DD 21's primary mission will be land attack support for ground forces. Armed with 5-inch/62 extended range guided munitions and 155mm *Howitzers*, the ship will provide naval gunfire support up to 100 miles inland. A land attack missile system will extend support between 100 and 200 miles. Tactical *Tomahawk* missiles will be able to reach targets from 200 to 1,600 nautical miles.

DD 21 will have the most advanced undersea warfare combat systems ever installed on a surface combatant. The ship's hangar will house attack helicopters as well as a system of unmanned aerial vehicles (UAV). In concert with other ships, DD 21 will contribute surveillance and force to establish and maintain local air superiority.

The DD 21 program emphasizes more than just improved offensive and defensive capabilities. Because DD 21's design will incorporate only the most advanced systems and materials on the market today, ships of the class can remain battle-ready with minimal maintenance and greatly reduced manpower. The current target manning requirement for DD 21 is 95 crewmembers.

DD 21 will be a smart ship, manned with an elite crew, ready to further the Navy's mission of "Forward ...From the Sea."

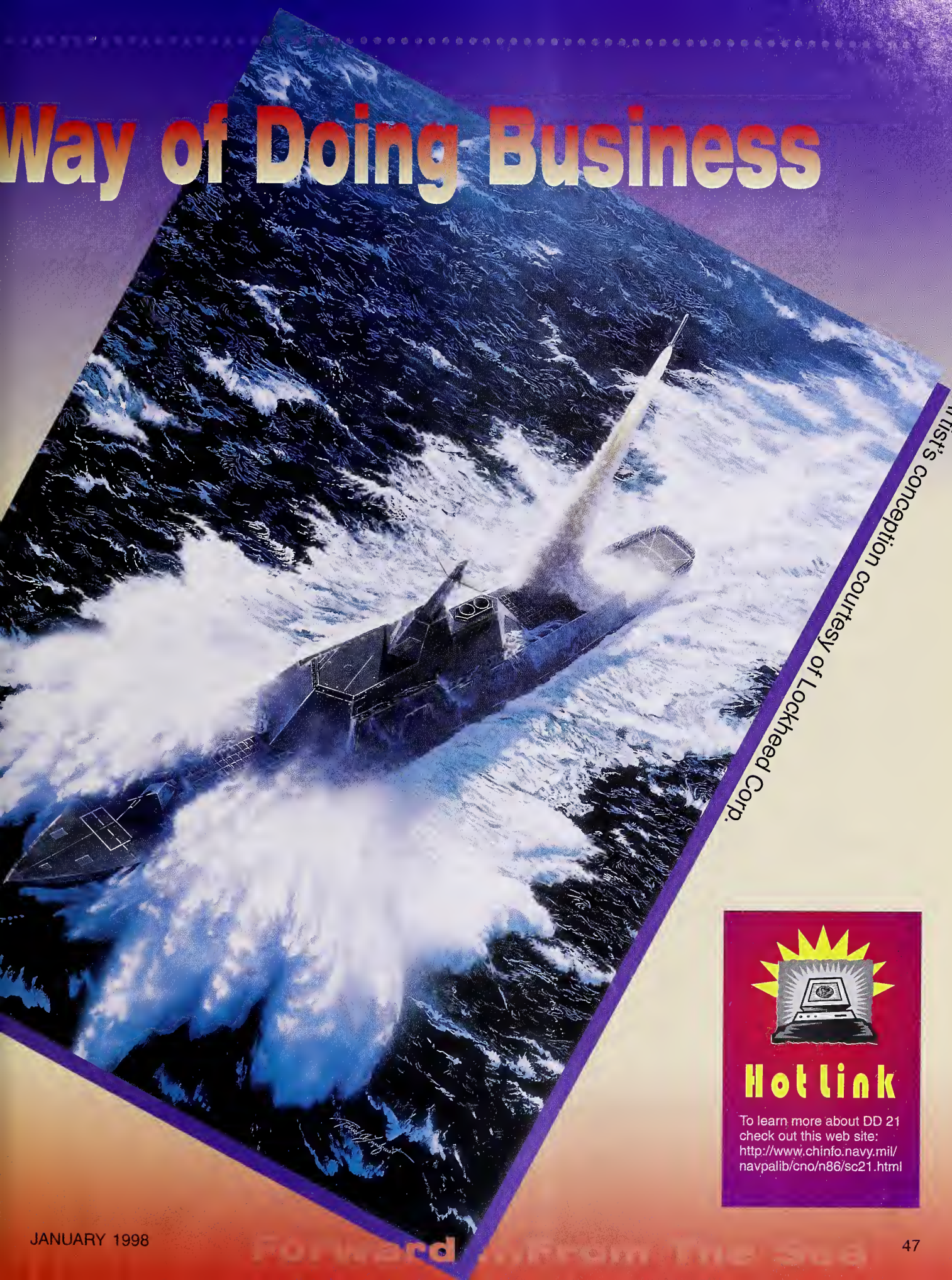


"Our 21st century surface force is being reshaped to give us broader capability to influence events ashore."

Admiral Jay L. Johnson
Chief of Naval Operations



Way of Doing Business

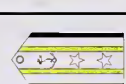
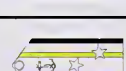
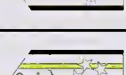


Artist's conception courtesy of Lockheed Corp.

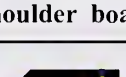
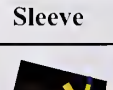
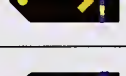
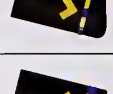
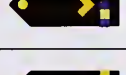
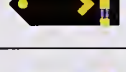
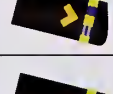
Hot link

To learn more about DD 21 check out this web site: http://www.chinfo.navy.mil/navpalib/cno/n86/sc21.html

Rank Insignia of Navy Commissioned Officers (O)

Pay Grade/Rank		Hat, shoulder, collar	Shoulder boards	Sleeve
O-1	Ensign	gold		
O-2	Lieutenant Junior Grade	silver		
O-3	Lieutenant	silver		
O-4	Lieutenant Commander	gold		
O-5	Commander	silver		
O-6	Captain	silver		
O-7	Rear Admiral (Lower Half)	silver		
O-8	Rear Admiral (Upper Half)	silver		
O-9	Vice Admiral	silver		
O-10	Admiral	silver		
O-11	Fleet Admiral	silver		

Rank Insignia of Navy Warrant Officer (W)

Pay Grade/Rank		Hat, shoulder, collar	Shoulder boards	Sleeve
W-1	Chief Warrant Officer			
W2	Chief Warrant Officer			
W-3	Chief Warrant Officer			
W-4	Chief Warrant Officer			

Rate Insignia of Navy Enlisted People (E)

Pay Grade/Rate	Hat and collar	Sleeve
E-1 Seaman Recruit		
E-2 Seaman Apprentice		
E-3 Seaman		
E-4 Petty Officer Third Class		
E-5 Petty Officer Second Class		
E-6 Petty Officer First Class		
E-7 Chief Petty Officer		
E-8 Senior Chief Petty Officer		
E-9 Master Chief Petty Officer		
E-9 Master Chief Petty Officer Of The Navy		

Line /Staff / Warrant Officer Corps Devices


Line


Supply Corps


Medical Corps


Nurse Corps


Medical Service Corps


Dental Corps


Judge Advocate General Corps


Law Community


Christian Chaplain

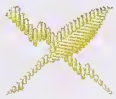

Jewish Chaplain


Civil Engineer


Ship's Clerk


Diving Officer


Ordnance Technician


Cryptologic Technician

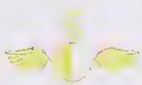

Repair Technician


Security Technician


Boatswain


Data Processing Technician

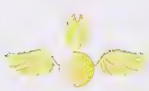

Engineering/ Nuclear Power Technician


Aerographer


Air Traffic Control Technician


Aviation Boatswain


Aviation Electronics Technician


Aviation Ordnance Technician

* Device for Explosive Ordnance Disposal not pictured

** Device for Muslim Chaplain still under review

ALL HANDS FY98 Monthly Basic Pay Chart

Pay Grade	Under 2	Over 2	Over 3	Over 4	Over 6	Over 8	Over 10	Over 12	Over 14	Over 16	Over 18	Over 20	Over 22	Over 24	Over 26
						Cumulative Years of Service									
						Enlisted Members									
E-9	As a senior enlisted advisor of a military service, E-9 basic pay is $4325.10.						2777.40	2839.80	2904.00	2970.90	3037.50	3096.00	3258.60	3385.50	3576.00
E-8	0.00	0.00	0.00	0.00	0.00	2328.90	2396.10	2458.80	2522.70	2589.60	2648.40	2713.50	2873.10	3000.90	3193.50
E-7	1626.30	1755.60	1820.10	1884.30	1948.50	2010.60	2074.80	2139.60	2236.20	2299.80	2363.40	2394.30	2555.10	2628.30	2873.10
E-6	1398.90	1524.90	1588.20	1655.70	1718.10	1779.90	1845.30	1940.10	2001.30	2065.80	2097.00	2097.00	2097.00	2097.00	2097.00
E-5	1227.60	1336.20	1401.00	1462.20	1558.20	1621.80	1685.70	1748.10	1779.90	1779.90	1779.90	1779.90	1779.90	1779.90	1779.90
E-4	1144.80	1209.30	1280.40	1379.10	1433.70	1433.70	1433.70	1433.70	1433.70	1433.70	1433.70	1433.70	1433.70	1433.70	1433.70
E-3	1079.10	1137.90	1183.20	1230.30	1230.30	1230.30	1230.30	1230.30	1230.30	1230.30	1230.30	1230.30	1230.30	1230.30	1230.30
E-2	1038.30	1038.30	1038.30	1038.30	1038.30	1038.30	1038.30	1038.30	1038.30	1038.30	1038.30	1038.30	1038.30	1038.30	1038.30
E-1	926.10														
E-1 <4	856.80														
Midn	558.04														
						Warrant Officers									
W-4	2387.40	2561.70	2561.70	2619.90	2739.30	2859.90	2979.90	3188.10	3336.30	3453.60	3546.00	3660.30	3782.70	3900.60	4077.60
W-3	2169.90	2353.80	2253.80	2384.10	2412.00	2588.40	2739.30	2828.70	2918.40	3005.70	3099.00	3219.90	3336.30	3336.30	3453.60
W-2	1900.50	2056.20	2056.20	2115.90	2231.70	2353.80	2443.20	2532.60	2619.90	2712.00	2801.10	2889.00	3005.70	3005.70	3005.70
						Commissioned Officers									
O-10	7566.30	7832.40	7832.40	7832.40	7832.40	8133.00	8133.00	8583.60	8583.60	9197.70	9197.70	9813.60*	9813.60*	9813.60*	10424.00*
O-9	6705.60	6881.40	7028.10	7028.10	7028.10	7206.60	7206.60	7506.60	7506.60	8133.00	8133.00	8583.60	8583.60	8583.60	9197.70
O-8	6073.50	6255.90	6404.10	6404.10	6404.10	6881.40	6881.40	7206.60	7206.60	7506.60	7832.40	8133.00	8333.70	8333.70	8333.70
O-7	5046.60	5389.80	5389.80	5389.80	5631.60	5631.60	5958.00	5958.00	6255.90	6881.40	7354.80	7354.80	7354.80	7354.80	7354.80
O-6	3740.40	4109.40	4379.10	4379.10	4379.10	4379.10	4379.10	4379.10	4527.90	5243.70	5511.30	5631.60	5958.00	6159.30	6461.70
O-5	2991.90	3512.70	3755.70	3755.70	3755.70	3755.70	3868.80	4077.60	4350.90	4676.70	4944.30	5094.60	5272.50	5272.50	5272.50
O-4	2521.50	3070.80	3275.40	3275.40	3336.30	3483.30	3721.20	3930.30	4109.40	4290.30	4407.90	4407.90	4407.90	4407.90	4407.90
O-3	2343.30	2619.90	2801.10	3099.00	3247.50	3363.60	3546.00	3721.20	3812.40	3812.40	3812.40	3812.40	3812.40	3812.40	3812.40
O-2	2043.60	2231.70	2681.10	2771.40	2828.70	2828.70	2828.70	2828.70	2828.70	2828.70	2828.70	2828.70	2828.70	2828.70	2828.70
O-1	1774.20	1846.50	2231.70	2231.70	2231.70	2231.70	2231.70	2231.70	2231.70	2231.70	2231.70	2231.70	2231.70	2231.70	2231.70

* Maximum amount that can be paid is $9225.

						Officers With More Than Four Years Active Duty as Enlisted or Warrant									
O-3E	0.00	0.00	0.00	3099.00	3247.50	3363.60	3546.00	3721.20	3868.80	3868.80	3868.80	3868.80	3868.80	3868.80	3868.80
O-2E	0.00	0.00	0.00	2771.40	2828.70	2918.40	3070.80	3188.10	3275.40	3275.40	3275.40	3275.40	3275.40	3275.40	3275.40
O-1E	0.00	0.00	0.00	2231.70	2384.10	2471.70	2561.70	2650.50	2771.40	2771.40	2771.40	2771.40	2771.40	2771.40	2771.40

NOTE: The Basic Allowance for Quarters is being replaced by a new basic allowance for housing (BAH). The new BAH amounts will be published in an upcoming issue.

Aviation Career Incentive Pay

Phase I Years of Aviation Service	Monthly Amount	Phase II Years of Service as an Officer	Monthly Amount
2 or less	$125	Over 18	$585
Over 2	$156	Over 20	$495
Over 3	$188	Over 22	$385
Over 4	$206	Over 25	$250
Over 6	$650		

Hazardous Duty Incentive Pay

E-7 to E-9	$200	W-1	$150
E-6	$175	O-7 to O-10	$150
E-5	$150	O-5 to O-6	$250
E-4	$150	O-4	$225
E-1 to E-3	$150	O-3	$175
W-4 to W-5	$250	O-2	$150
W-3	$175	O-1	$150
W-2	$150		

Monthly Submarine Pay Chart

Pay Grade	2 or less	Over 2	Over 3	Over 4	Over 6	Over 8	Over 10	Over 12	Over 14	Over 16	Over 18	Over 20	Over 22	Over 24	Over 26
Enlisted Members															
E-9	225.00	225.00	225.00	270.00	295.00	310.00	315.00	330.00	345.00	355.00	355.00	355.00	355.00	355.00	355.00
E-8	225.00	225.00	225.00	250.00	270.00	295.00	310.00	315.00	330.00	330.00	345.00	345.00	345.00	345.00	345.00
E-7	225.00	225.00	225.00	250.00	255.00	265.00	275.00	295.00	310.00						
E-6	155.00	170.00	175.00	215.00	230.00	245.00	255.00	265.00							
E-5	140.00	155.00	155.00	175.00	190.00	195.00									
E-4	80.00	90.00	100.00	170.00	175.00										
E-3	80.00	90.00	100.00	170.00	175.00	90.00									
E-2	75.00	90.00													
E-1	75.00														
Warrant Officer															
W-2 to W-4	235.00	310.00	310.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00
Commissioned Officers															
0-8 to O-10	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00
O-7	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	355.00	540.00	535.00	535.00	410.00	410.00	355.00
O-6	595.00	595.00	595.00	595.00	595.00	595.00	595.00	595.00	595.00	595.00	595.00	595.00	595.00		
O-5	595.00	595.00	595.00	595.00	595.00	595.00	595.00	595.00	595.00	595.00	595.00	595.00	595.00		
O-4	365.00	365.00	365.00	405.00	595.00										
O-3	355.00	365.00	365.00	390.00	595.00										
O-2	235.00	235.00	235.00	235.00	235.00	235.00	355.00								
O-1	175.00	175.00	175.00	175.00	175.00	175.00	355.0								

Monthly Career Sea Pay Chart

Pay Grade	1 or less	Over 1	Over 2	Over 3	Over 4	Over 5	Over 6	Over 7	Over 8	Over 9	Over 10	Over 11	Over 12	Over 13	Over 14	Over 16	Over 18	Over 20
Enlisted Members																		
E-9	100.00	100.00	120.00	175.00	190.00	350.00	350.00	375.00	390.00	400.00	400.00	410.00	420.00	450.00	475.00	520.00		
E-8	100.00	100.00	120.00	175.00	190.00	350.00	350.00	375.00	390.00	400.00	400.00	410.00	420.00	450.00	475.00	500.00	520.00	
E-7	100.00	100.00	120.00	175.00	190.00	350.00	350.00	375.00	390.00	400.00	400.00	410.00	420.00	450.00	475.00	500.00		
E-6	100.00	100.00	120.00	150.00	170.00	315.00	325.00	350.00	350.00	365.00	365.00	365.00	380.00	395.00	410.00	425.00	450.00	
E-5	50.00	60.00	120.00	150.00	170.00	315.00	325.00	350.00										
E-4	50.00	60.00	120.00	150.00	160.00													
Warrant Officers																		
W-4	150.00	150.00	150.00	150.00	170.00	290.00	310.00	310.00	310.00	310.00	350.00	375.00	400.00	400.00	450.00	450.00	500.00	
W-3	150.00	150.00	150.00	150.00	170.00	270.00	280.00	285.00	290.00	310.00	350.00	375.00	400.00	400.00	425.00	425.00	450.00	
W-2	150.00	150.00	150.00	150.00	170.00	260.00	265.00	265.00	270.00	310.00	340.00	340.00	375.00	375.00	400.00			
Commissioned Officers																		
0-6				225.00	230.00	230.00	240.00	255.00	265.00	280.00	290.00	300.00	310.00	310.00	325.00	340.00	355.00	380.00
0-5				225.00	225.00	225.00	225.00	230.00	245.00	250.00	260.00	265.00	265.00	265.00	285.00	300.00	315.00	340.00
0-4				185.00	190.00	200.00	205.00	215.00	220.00	220.00	225.00	225.00	240.00	240.00	270.00	280.00	290.00	300.00
0-3				150.00	160.00	185.00	190.00	195.00	205.00	215.00	225.00	225.00	240.00	240.00	260.00	270.00	280.00	290.00
0-2				150.00	160.00	185.00	190.00	195.00	205.00	215.00	225.00	225.00	240.00	240.00	250.00	260.00	270.00	280.00
0-1				150.00	160.00	185.00	190.00	195.00	205.00	215.00	225.00	225.00	240.00	240.00	250.00	260.00	270.00	280.00

Proposed 1998 Basic Allowance for Subsistance

Enlisted (Daily) Rations in kind not available

<4mos.	$7.73
All Other	$8.38

On leave or authorized to mess separately

<4mos.	$6.86
All Other	$7.43

Emergency conditions

<4mos.	$10.26
All Other	$11.10

Officers $155.70 a month

If receiving rations in kind, partial BAS is $.31 per day.

Source (All Charts): Defense Finance and Accounting Service

Network Centric Warfare

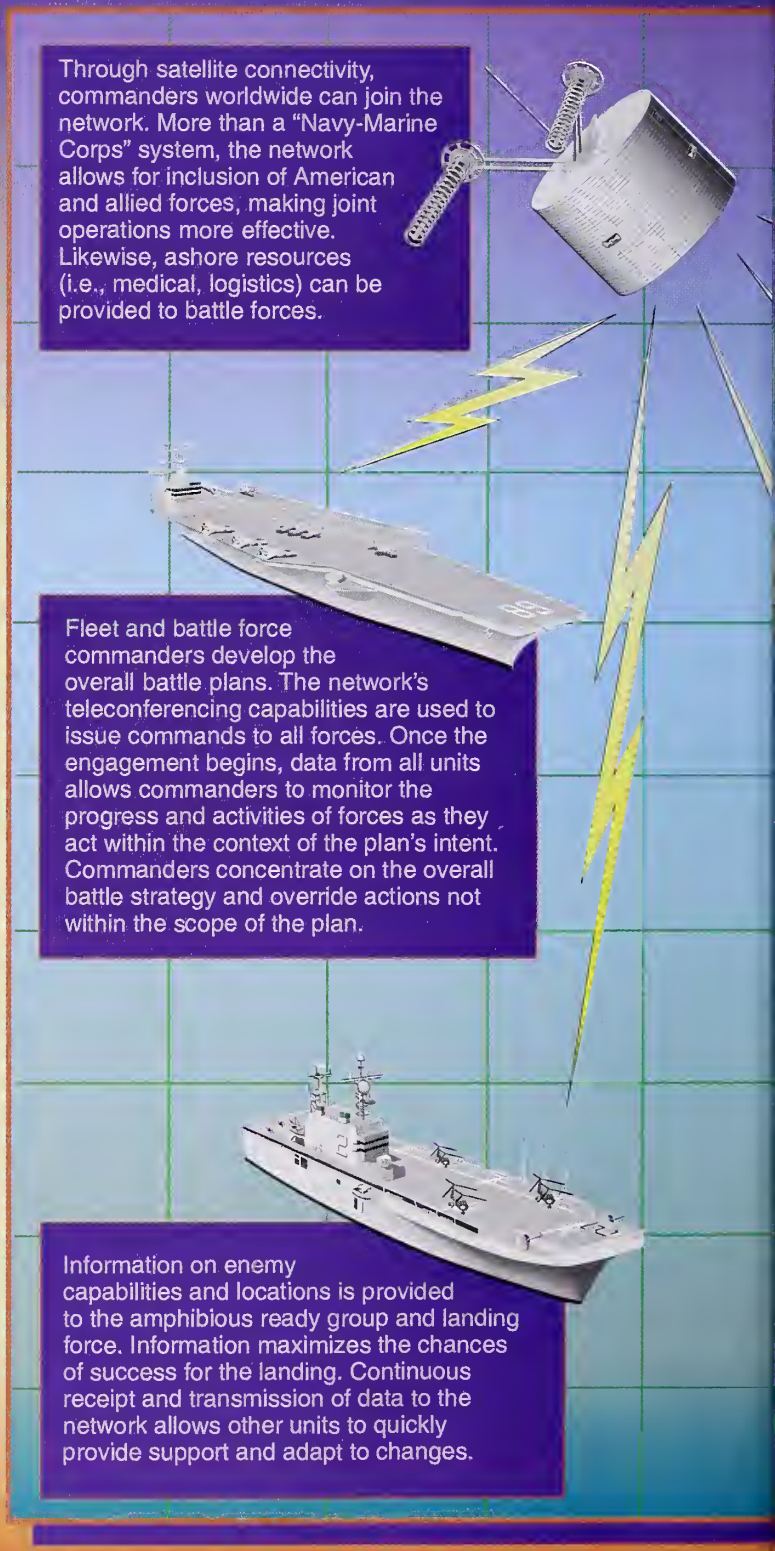
Command, Control, Communications, Computers and Intelligence (C4I) network paves way to the future

As a stand-alone computer user, you strive to get the most out of your machine — more memory, more storage, and faster processing speed all make your computer "platform" a better tool to get the job done. In a local area network environment, the emphasis shifts to making the network faster, stronger and more capable. While it's important to make sure each individual computer maintains minimum requirements, overall performance is dictated by the network.

Network Centric Warfare, an information network, will use the advances in communication and computing technology to connect widely dispersed and diverse forces into an effective and coordinated team. But the "revolution" is not just about hardware and software, it's about awareness. Our forces will have a significant information advantage. No longer dependent on information being "passed along," units can act on changing situations as they happen to exploit weaknesses and counter enemy strategies to accomplish the overall mission. This "speed of command," a fundamental change in the way the Armed Forces operate, is the cornerstone of this new doctrine.

VADM Arthur K. Cebrowski, director of Space Information Warfare Command and Control, is setting the pace for the Navy's move to *Network Centric Warfare*. "This revolution in military affairs is driven by the seismic upheaval in information technology that is causing a tidal wave of change throughout society."

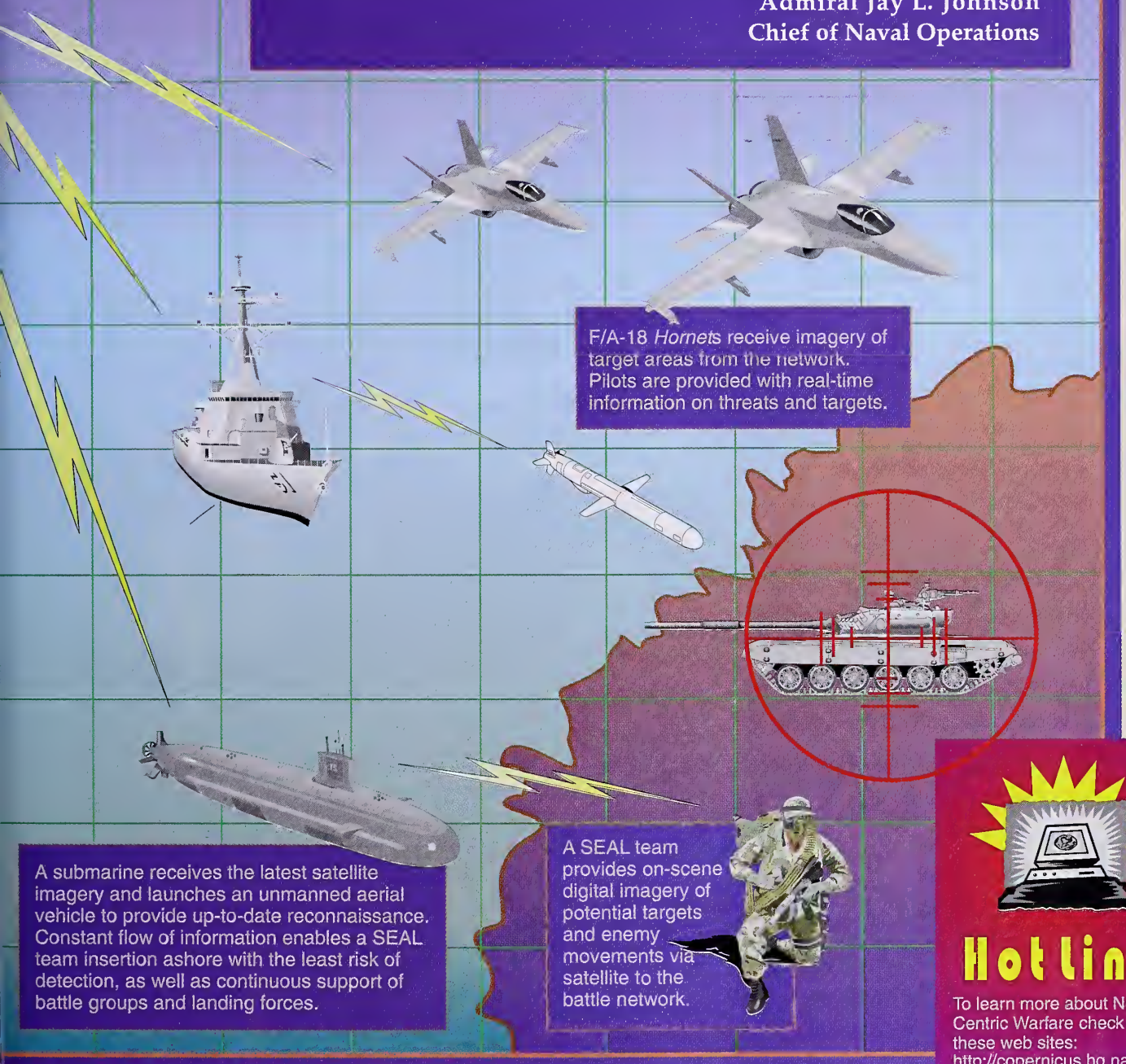
The Navy and Marine Corps will continue to invest in fully-capable ships, aircraft and equipment. But the design of these platforms will center on which part each one plays in the "grid." It's a new way of doing business in a changing world.



Real-time Awareness

"The information revolution has fundamentally changed the nature of naval warfare. The battlefield of the 21st century will be one in which the force with mastery of the information spectrum will prevail, making information superiority critical to our warfighting success."

Admiral Jay L. Johnson
Chief of Naval Operations



F/A-18 *Hornets* receive imagery of target areas from the network. Pilots are provided with real-time information on threats and targets.

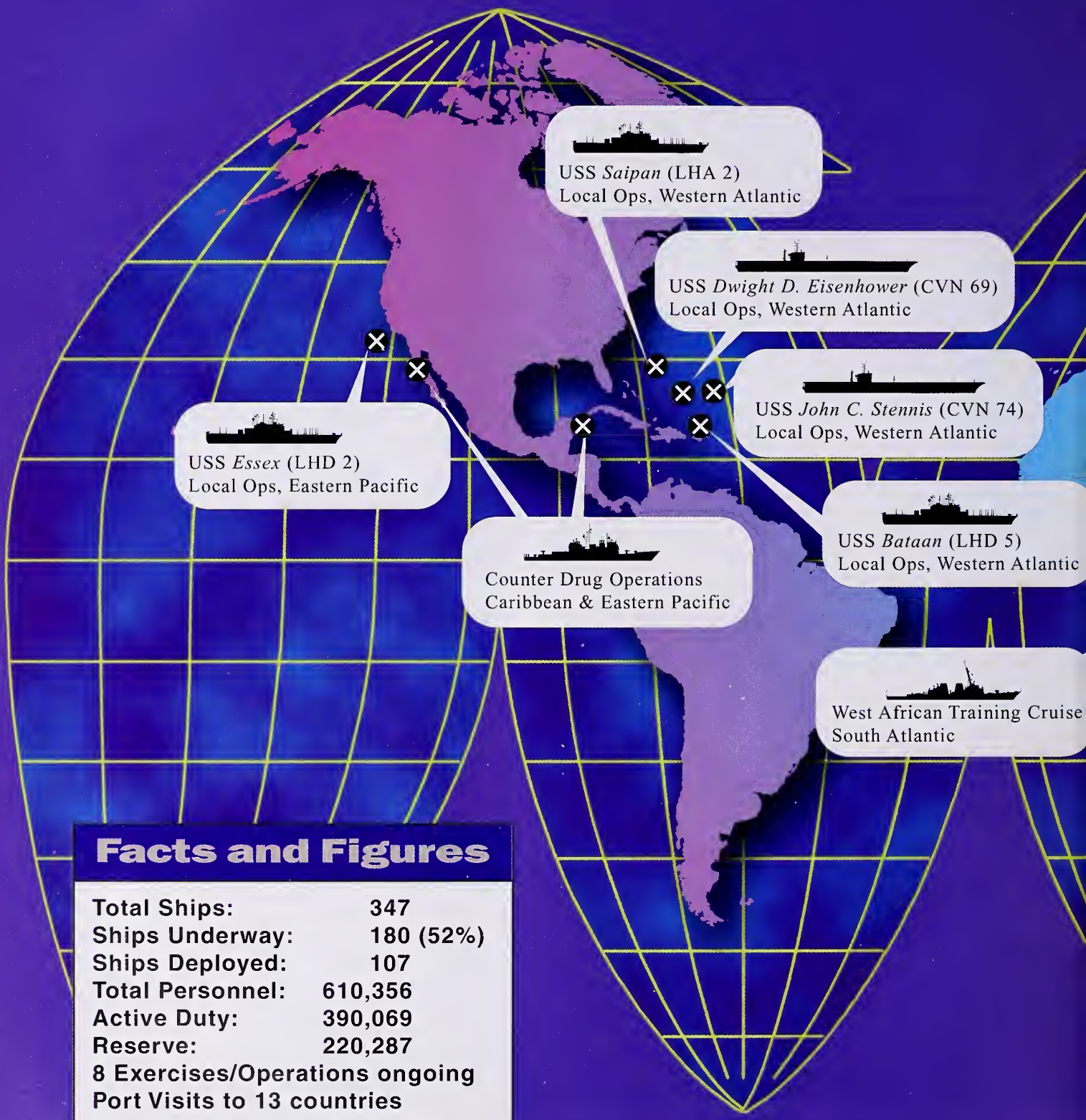
A submarine receives the latest satellite imagery and launches an unmanned aerial vehicle to provide up-to-date reconnaissance. Constant flow of information enables a SEAL team insertion ashore with the least risk of detection, as well as continuous support of battle groups and landing forces.

A SEAL team provides on-scene digital imagery of potential targets and enemy movements via satellite to the battle network.

Hot link

To learn more about Network Centric Warfare check out these web sites:
http://copernicus.hq.navy.mil
http://spider.osfl.disa.mil/missneed/mns.html

Snapshot



Facts and Figures

Total Ships:	**347**
Ships Underway:	**180 (52%)**
Ships Deployed:	**107**
Total Personnel:	**610,356**
Active Duty:	**390,069**
Reserve:	**220,287**

8 Exercises/Operations ongoing
Port Visits to 13 countries

Note: As of Nov. 17, 1997

of THE FLEET


USS *Guam* (LPH 9)/24th MEU(SOC)
Exercise *Nobile Shirley 97-2*
Mediterranean Sea
USS *Nimitz* (CVN 68)/Air Wing 9
Operation *Southern Watch*
Arabian Gulf
USS *Independence* (CV 62)/Air Wing 5
Inport Yokosuka/Atsugi, Japan
Maritime Interception Operations
Arabian Gulf
Exercise *Neon Falcon '98*
Arabian Gulf
USS *Belleau Wood* (LHA 3)
Port Visit Okinawa
USS *Peleliu* (LHA 5)/13th MEU(SOC)
Ops, Arabian Sea
USS *George Washington* (CVN 73)/Air Wing 1
In transit to Arabian Gulf
Key
Carrier Battle Group
Destroyers
LHAs, LHDs and LPHs
Guided-missile cruisers





Photo by PH1 Jim Hampshire

Sailors:

The Real Smart Weapons

The Fleet is heading into the 21st century with a vision of highly trained Sailors operating some of the most advanced technology imaginable. You can be part of that vision. We want men and women who are not afraid of new challenges to continue serving their country. Education, adventure and experience are as close as a visit to your Command Career Information Team or a call to 1-800-FOR-NAVY. See how far your career can take you. Meet with a member of the Team today.

Navy ... Let the journey continue.

Navy Web Sites

In the Gulf

Navy Jobs | What's New

Site Index | Help Page

Navy News | Status of the Navy

The Carriers | Fact File

Digital Images | *All Hands*

E-mail to Ships | Got a Question?

Forward deployed ...
Fully engaged



The United States

Navy

Welcome Aboard

www.navy.mil

ALL HANDS

MAGAZINE OF THE U.S. NAVY

FEBRUARY 1998



Inside

DTS gives Sailors live TV & Radio at Sea

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The Chief of Naval Operations Admiral Jay L. Johnson talks about tomorrow's Navy and how it affects you.

6 *Moving up the Ladder*
The key to moving up in the Navy is understanding how the advancement system works, so find out how you can increase your chances.

10 *A Hero of the Maine*



If you think "Honor, Courage and Commitment" is just some new catch phrase, then the story of John B. Load is one you should read.

16 *Preparing our leaders*
Enlisted instructors at Surface Warfare Officer's School in Newport teach hundreds of officers each year to get them ready for the fleet.

20 *Live TV & Radio scores big with Fleet Sailors*

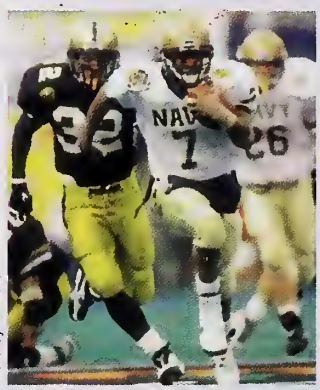


Photo by Phil Hoffmann

Sailors aboard USS *Guam* (LPH 9) and USS *Tarawa* (LHA 1) saw the Army-Navy game live at sea and say the picture was "awesome."



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Photo by LT Scott M. Allen

24 *Heavy Metal*

Giving birth to 95,000 tons of diplomacy is no easy task, but the Navy's newest aircraft carrier *Harry S. Truman* (CVN 75) is about to join the fleet. Find out what goes into making this giant jigsaw puzzle.

30 *Movie Call*

"Movie Call" will never be the same with the Navy's new Cinema at Sea program that puts wide-screen systems on board ships.

32 *Boomer Life: hiding with pride*

Go aboard USS *Kentucky* (SSBN 737) and find out why life aboard a fleet ballistic submarine is all about being quiet and remaining undetected.

36 *YMCA knows how to have fun*

The Armed Services YMCA offers a variety of free-to-low cost programs to Sailors and their families.

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DEPARTMENTS



PH3 Benny R. Cagnolia

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On the Cover

This month's front cover, illustrated by DM1 Eric Murry assigned to Navy Art Gallery, Washington, D.C., salutes African-American Sailors serving around the world.

ALL HANDS
On Line



Check us out at ...
http://www.chinfo.navy.mil/navpalib/allhands/ah-top.html

Photo by PH3 Joseph Hendricks



Clearing the Scuttlebutt

Straight Talk from the Chief of Naval Operations

Responses from Admiral Jay L. Johnson on issues most important to you.

Q *What are your thoughts about pay and compensation as we head into the New Year?*

A We're making some really good strides. The latest defense authorization bill, for instance, has the 2.8% pay raise in it which went into effect Jan. 1st. Is that enough? Is that what Sailors deserve? Probably not. But the truth of it is, by law, that's as much as we're able to get. So we were supported to the maximum extent of the law.

BAQ and VHA have been combined into one allowance for housing. The net result is it's going to be more accurate and more responsive, and I think it's going to mean the right people are going to get the right amount of money for housing allowances.

We haven't updated the flight pay program for almost 10 years. It's being updated starting this new year. And the same goes for some of the other special skills.

I use those as just a few examples to tell you there is a lot going on in the compensation support and in the quality of life support for all of us. Sailors should take comfort in that and feel good about it. It's a commitment I never lose sight of.

Q *Are there any other compensation issues you are working on?*

A Yes. You might have heard talk about the proposed Thrift Savings Plan. I support TSP as a tool to help our military families plan for their futures. Some say it would threaten our military retirement benefit package. To the contrary, I believe it strengthens it. We really need to look at this proposal separately from the current retirement

benefit because TSP is an investment vehicle — a transportable, tax-deferred method of capital appreciation which would put our people on par with other federal employees who enjoy both a retirement plan and a savings plan. TSP is a great idea, and I'm working hard to see it implemented. We hope our efforts are successful because TSP would be an excellent means to help in retaining our best Sailors.



What about the size of the force in terms of people and ships?



We are reshaping the Navy. We have 390,000 active-duty personnel today — the glide slope we're coming down is going to take us to about 369,000 to 370,000 in the force by the year 2003 — that's OK — that's the right size for us. The Reserve Force is going to come down to about 90,000. The civilians are coming down by about 8,500 right now. I'm okay with that.

The number of surface combatants is coming down by about 16 or 17 more ships. The number of attack submarines is coming down by about 22 more ships, but what you'll see on the other end of all that is, what I would call a more meaner, leaner Navy. It's a Navy that can do its job and still live within its means, That way we don't get to the middle of the year each year, and have them send you a message that says, 'Stop all moves, we're out of PCS money. The manpower account is empty — we've got to wait till we get money mid-year.'

We're doing our level best to get out of that business so that when we start the year we know how much money we have and we spend that money throughout the year and we don't do the hip hop. We're very serious about making that work. Living within our means — it's extremely important.



Do you anticipate improvements in advancement numbers?



Advancements are too slow and too low. We know that, but I would tell you and ask you to make sure that we all keep it in perspective. When you're coming down in size and retention is good, as it is right now, and we all make a commitment that we're going to keep the faith with the career force and that we're not going to RIF anybody, then we all have to accept a slowdown in advancement until we get stabilized at the bottom of that glide slope. Why am I saying that? I'm asking Sailors to take a longer view of where we are headed in the context of advancements. Once we get through this reshaping, the numbers will come up. It's totally predictable and it will happen. So, if you're frustrated because you know you deserve to be advanced, keep trying. It will come.



With what seems like increasing commitments in a downsizing environment, will we be seeing longer deployments?



No. I'm absolutely committed to holding the line on our six-month deployments. I would tell you that for us, OPTEMPO and PERSTEMPO right now are OK. Why do I say that? I say it because the only one who can waive our PERSTEMPO policy is the CNO. So I have full visibility on the issue. We are not going back to the days of nine month deployments with short turnaround periods. We learned some very painful lessons about retention

when we did. There was a time when we prided ourselves on nine-month deployments, coming home for five months and then doing another. Next time you look at going for another nine months, you're the only one standing there. Everyone else is gone. That's why we have a policy of six-month portal-to-portal deployments, a two-to-one turn-around ratio and a minimum 50 percent time in home port during a five-year period — looking back three years and ahead two. So we watch OPTEMPO and PERSTEMPO very closely. Our tip of the spear readiness is as good as it has ever been. Our focus of effort today is on the nondeployed side of our lives. That's where the wheels could come off the trolley if we're not smart about it. I want to make sure that we aren't going TAD too much — in some cases we are. I want to look at working harder to balance the need to work-up for the next deployment with the opportunity for Sailors to spend quality time in home port.

Q *What is one major item on your agenda that you'd like to share with Sailors?*

A I'd like all of us to think about innovation in the Navy. We're putting ourselves in the innovation business. I believe we need to work hard on capturing the technology race that's all around us. We can do it operationally, organizationally and we can do it with the actual applications of the technology. We're working real hard to do that. We're making incredible investments in technology and in innovation. We're reorganizing the Navy's doctrine, innovation and strategy organization. What I'm really trying to tell you is we're going to try to realign ourselves organizationally in such a way that we can capture innovation in very profound ways and apply it back into everything we do in the Navy. That's not something the CNO's going to do, that's something Sailors are going to do. Everybody is going to be able to make an input. That's important for our future.

Q *Some people say you can't make a mistake anymore, that it affects your career too much. What's your view as the CNO?*

A I hear a lot about the business of "zero defects", that if you make one mistake you're out of here. Here's what zero defects means to me: In parts of our lives, zero defects is the only way to go. As a fighter pilot, I spent a lot of time on flight decks of aircraft carriers. The flight deck of an aircraft carrier at sea is a zero-defect environment. You make a mistake and somebody can die. The business of laws, criminal laws, moral laws — that's zero-defect stuff — no compromise. Put those aside for a moment. In everything else we do, the rest of our lives, we have to accept the reality that none of us is perfect. We're all going to make mistakes, we all have made them and we'll continue to make them. The key to that is understanding reality No. 1, and No. 2 — learning from those mistakes and then getting on with it. It's much easier to say than to do.

I have to be careful when I say that because people forget the first part of what I said. Don't forget the part where zero defects is the only place to go. But for the rest of it, you've got to be real with each other. That's what 'zero defects' mean to me.

➤ADM Johnson, talks with Airman Alan Milan, from Ft. Lauderdale, Fla, during a brief visit to the Persian Gulf region Christmas Day, 1997. George Washington and Carrier Air Wing One are operating in the Persian Gulf to enforce UN sanctions against Iraq, under Operation Southern Watch.

Q *What advice do you have for Sailors to help them reach their full potential?*

A I would ask each of you to make sure that wherever you are, wherever you work — it's bigger than work really, it's 24 hours a day — to do everything in your power to create an atmosphere or an environment of dignity, trust, respect, confidence and caring. It's golden rule stuff. Set an environment around you in which you'd like to operate, that you'd be comfortable with no hassles, no discrimination— you get the idea. Each of us can directly influence that and we must.

I'm saying this because if we can do that, and no matter where you are turns out to be good for you, it's good for the people around you, and it's good for the Navy too because it allows each of us the opportunity to reach our own full productivity because we're not worried about this or that. You can focus on what you're doing, the task at hand, and you can produce. That's what it is all about. I would ask each of you to do everything you can to create that atmosphere, wherever you are, dignity, respect, trust, confidence, friendship — you get the idea. ⚓

The CNO's Vision for Tomorrow's Navy
The Four Stars

Operational Primacy
"Without question, we're the greatest navy in the world, Number One, hands down. Operationally, no one can touch us."

Leadership
"Right now, I have huge confidence in the leadership of the Navy and I have great hope for the future. We've done some pretty profound things. One is, we're taking a different approach, in some respects, to the recruits we bring into the Navy. ... We get recruits in the door and we're working very hard to instill pride in them instead of fear."

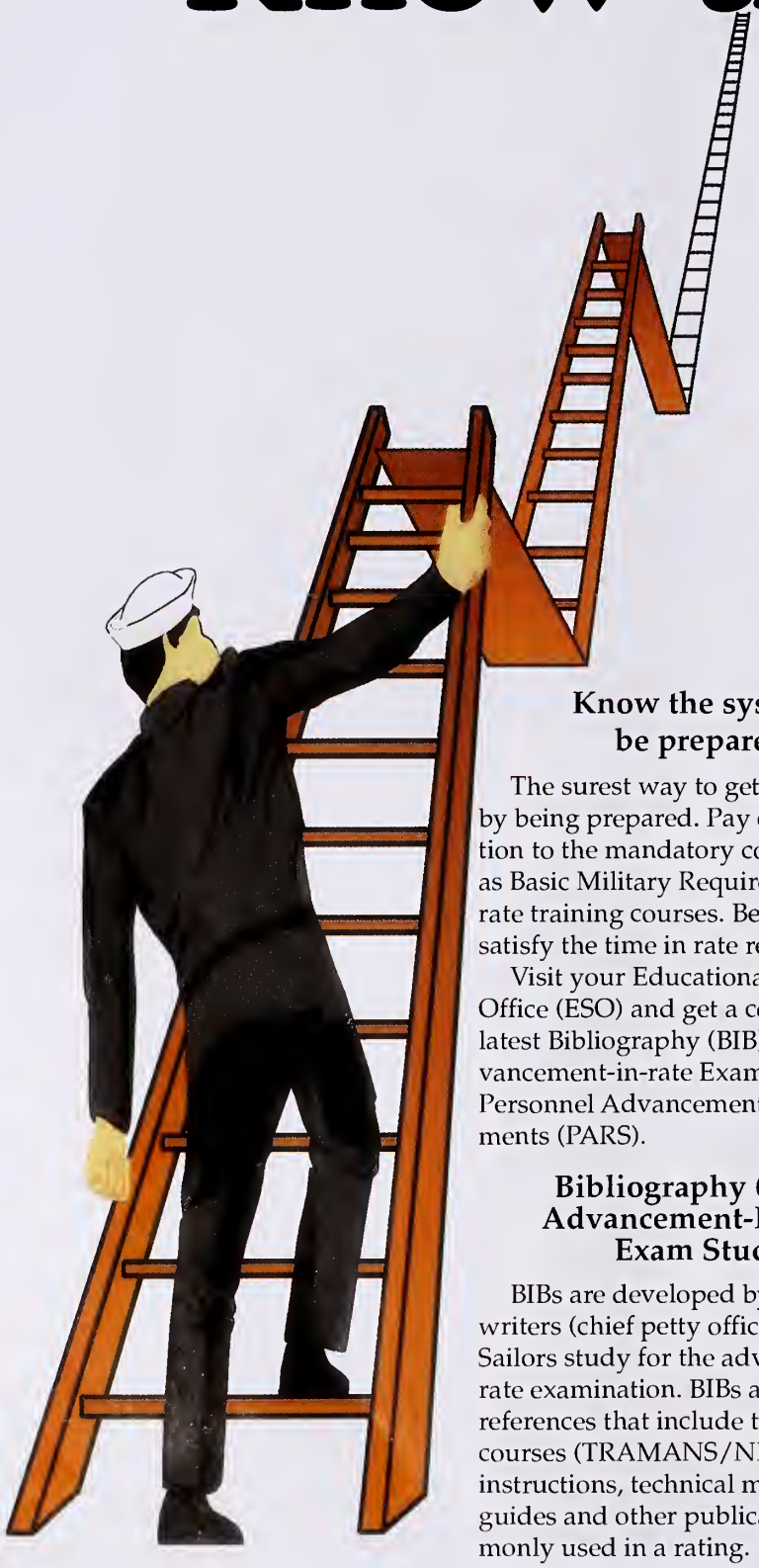
Teamwork
"What I'm asking Sailors to do in simple terms is to take better care of each other. Invest in each other within the chain of command in very positive ways and I'm convinced we'll be a stronger Navy for it."

Pride
"Every Sailor should take pride in what he or she is doing well, if not better, than they did before. We should all take pride in that."



Photo by PHAN Johnnie Robbins

Know the Steps



Moving up the Navy advancement ladder means increased responsibility, greater prestige and more pay. Any Sailor who has spent his or her career successfully climbing the advancement ladder knows there is no real secret to making rank. The key to moving up in the Navy is simply understanding how the advancement system works, meeting set requirements on time and scoring well on the Navy wide exams.

The next few pages can help you understand the system.

Know the system, be prepared

The surest way to get advanced is by being prepared. Pay close attention to the mandatory courses, such as Basic Military Requirements and rate training courses. Be sure you satisfy the time in rate requirements.

Visit your Educational Services Office (ESO) and get a copy of the latest Bibliography (BIB) for Advancement-in-rate Exam Study and Personnel Advancement Requirements (PARS).

Bibliography (BIB) for Advancement-In-Rate Exam Study

BIBs are developed by exam writers (chief petty officers) to help Sailors study for the advancement-in-rate examination. BIBs are a list of references that include training courses (TRAMANS/NRTCs), instructions, technical manuals, guides and other publications commonly used in a rating.

Beginning March 1998, BIBs will be available only in electronic format and will be posted (issued) three times a year. The E-4/E-5/E-6 BIBs will continue to be posted in March and September; the E-7 BIBs will be posted in July.

BIBs posted in March will be for active-duty E-4/5/6 September exams and for Selective Reserve E-4/5/6 February exams.

BIBs posted in July will be for active-duty E-7 January exams and for Selective Reserve E-7 February exams (for the following year.) For example: BIBs issued for active-duty E-7 in 1998 will be used for Selective Reserve E-7 exams in 1999.)

BIBs posted in September will be for active-duty E-4/5/6 March exams and for Selective Reserve E-4/5/6 August exams.

How to Obtain BIBs

BIBs are issued only in electronic format from the following sources:--

to climb the ladder

-- NETPDTC Homepage at: http://www.cnet.navy.mil/netpdtc/htm

-- To go directly to BIBs: http://www.cnet.navy.mil/netpdtc/nac/bibs/bibs.htm

-- NETPDTC Bulletin Board — DSN 922-1394/1820 or commercial (304) 452-1394/1820

-- BUPERS Access Bulletin Board — DSN 224-8070 or commercial (800) 346-0217/0218/0227 or (703) 614-6059/8070/8076.

-- SALTS (Streamlined Automated Logistics Transmission System) — For information on how to access SALTS see your supply department, or call DSN 442-1112 or commercial (215) 697-1112

Personnel Advancement Requirements (PARs)

PARs are skills and abilities that can best be demonstrated by actual performance. Completion of PARs is mandatory for advancement. PARs are developed by the same chief petty officers who develop BIBs

How to obtain PARs

PARs are now available from the same electronic sources as BIBs and can also be ordered through the supply system. Starting in January 1999, PARs will only be available in an electronic format.

For more information on the availability of BIBs and PARs, contact NETPDTC:

-- Phone: DSN 922-1328 or commercial (904) 452-1328

-- FAX : DSN 922-1819 or commercial (904) 452-1819

-- e-mail: navy.advancement@smtp.cnet.navy.mil

-- SALTS: NETPDTC PMA



Photo by PH1 Dolores L. Anglin

YN3 Chad Johnson of Richmond, Ind., positions a record in a projector for viewing by a board at BUPERS.

Study early, study often

Being a top pro at your job will always help you in advancement. Your performance evaluations factor into the advancement equation. But, having top-notch skills is not enough if you don't score well on the Navy-wide advancement exam.

Twice a year, candidates for E-4 through E-6 participate in exams on their rating knowledge. E-7 candidates take the tests annually, usually in January. "The Back Page" of *Link* magazine lists the dates for the upcoming advancement cycles.

If you have an up-to-date copy of your BIB, you have a complete guide to the material included on the test. The three-hour exams are based strictly upon the sources listed in the BIB.

There are no tricks or secrets to taking the exam – you must know your subject to score well. Here are some tips on studying:

* **Start early.** Advancement exams cover all areas of the technical knowledge expected of a petty officer of the next senior rank. Waiting until the last minute, then trying to cram everything into a few marathon sessions increases your personal stress levels and sets you up for failure. The best time to start is as soon as you tack on your current stripes.

* **Plan to win.** A good study plan can help you organize your subjects, get reference sources, ask questions about difficult information and pace yourself until the exam date.

* **Make time.** Make studying a



U.S. Navy photo

part of your lifestyle. Put aside set times regularly – daily is great, every other day works well for some – and stick to it. Try studying three days a week during your lunch break or after dinner every night. Hour long sessions are best, but don't give up if your schedule sometimes cuts your time in half – if you only get through five questions in your rate training course, you are still five answers ahead of where you would've been if you had skipped the session.

* **Teamwork works.** Get a study partner or start a study group. You can meet almost anywhere – a mess decks, library, berthing compartment or BEQ room. Sharing knowledge and experiences can level out the sometimes bumpy playing field of complex rating subjects, especially if it's an area you haven't had a chance to work in hands-on.

The exam: Pace yourself

Every mess-deck lawyer can give you the inside scoop on taking the test – but it is all worthless advice. Answers do not conform to any certain pattern. Secret codes are not written into the questions. "All of the above" is not always the correct answer. Exams are not designed to test minimum information required for proper performance. Beyond studying, however, there are a few things that can help:

* Get some rest. You have already done the hard part if you started with a good study plan and stuck with it. Take off the night before the exam. Go out for dinner, if possible. Relax with your family or friends. Take a walk or hit the gym for a moderate workout. And, get a good night's sleep.

* Pace yourself. You have three hours to take the exam. Start by reading all the questions and answers. Go back and mark the answers on those you know. Remember, your first choice is usually the best choice. If you really don't know the answer, move on to the next question. Don't try to talk yourself out of a good answer. Go back and review the tougher questions. If you still aren't sure, take an educated guess rather than leaving the answer blank. You aren't graded by the number of wrong answers, but on the number of correct responses.

Exam scoring

Commands send answer sheets by registered mail to the Naval Education and Training Professional Development and Technology Center (NETPDTC) in Pensacola, Fla., where they are scanned and scored.

Number crunching

The Bureau of Naval Personnel sets advancement quotas, which are vacancy driven. Advancement numbers involve many factors, such as current manning, future of the rating (in the case of disestablishments or mergers), how many Sailors in the rating have retired or left the service and the future needs of the Navy. The bottom line is you can't get advanced unless there is a slot open in your rating.

The number of advancement slots is passed to NETPDTC. That number of qualified E-4 through E-6 candidates is then advanced. Boards annually select for advancement to E-7 from the pool of candidates who passed the exam. Advancement usually gets tougher at higher pay grades because of keener competition for fewer openings.

Feedback from the exam

After the list of candidates selected to advance is complete, NETPDTC sends results to members in the form of examination profiles. The profiles include the candidate's final multiple score (FMS), its standard score and advancement status. Also, the profile shows the Sailor's relative standing with all other Sailors in their rate in each of the subject-matter sections of the exam.

There are several myths surrounding the profile information form. Understanding the facts (and disregarding the myths) will help examination candidates better prepare for future advancement examinations.

Myth 1: "The profile form tells candidates how many questions they answered correctly in each examination section."

Not True: The profile form only tells candidates how well they did in each examination section in relation to their peers. For example: A rating of superior indicates a candidate was in the top 10 percent of the candidates taking this section — not how many questions were answered correctly. A superior standing simply tells candidates that they answered more questions correctly than their peers who were rated below superior.

Myth 2: "The profile form tells candidates what they should study for the next exam.

Not True: The profile form only reflects how well candidates performed, in relation to their peers, this exam. The next examination will not have the same questions and candi-

dates will not be competing with the same set of peers. There are no shortcuts! For the next exam, candidates should always study the references listed in the bibliography developed for their advancement-in-rate exam.

Myth 3: "Profile forms may be used as a basis for training programs.

Not True: Because of the reasons stated in myths 1 and 2. There are no shortcuts. A training program that covers the entire bibliography will produce the best results.

The FMS: Making the cut

The standard score from the exam is factored into the final multiple score (FMS).

The FMS shows who makes the cut and is ultimately advanced or becomes selection board eligible.

The FMS is compiled for E-4s, E-5s and E-6s by factoring the test score, time in service, performance mark averages, time in rate, awards and passed not advanced (PNA) points (see the chart).

Sailors competing for E-4 through E-6 in each rating are ranked according to their FMS – the highest FMS is at the top, followed by the others in descending order to the last person with the lowest FMS.

Advancement quotas are matched to the ranking. Sailors are advanced starting with those holding the highest FMS and working down until openings are filled.

For E-7 candidates, the FMS determines who is selection board eligible. Their FMS includes only standard score and performance mars.

Chiefs picked by selection boards

Candidates for chief petty officer become selection board eligible if their FMS makes the grade. Board members review their records and select the best possible Sailors to fill vacancies in each rating.

Selection boards review senior chief and master chief candidates as well. Candidates must be recommended by their commanding officers and must meet all other qualifications, such as required correspondence courses, time in rate, etc.

E-7 through E-9 selection boards convene annually. "The Back Page" of *Link* lists board dates.

An equal chance to compete

There are no guarantees that meeting all requirements will result in a Sailor being advanced.

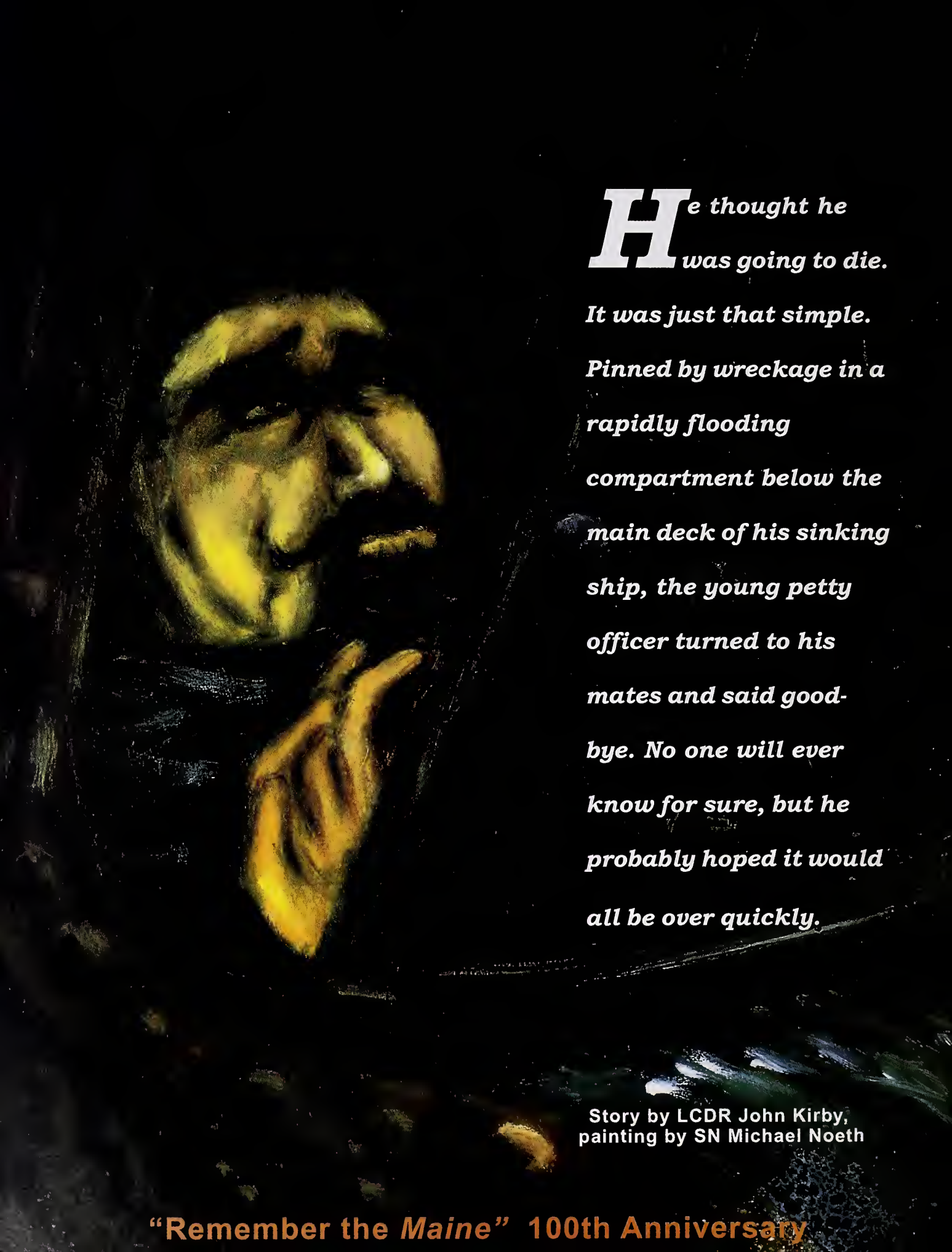
The Navy system guarantees each Navy man or woman an equal opportunity to compete for vacancies. ⚓

Advancement Checklist

- ❒ Study, study, study.
- ❒ Demonstrate leadership, military and professional knowledge.
- ❒ Ensure performance evals reflect your strengths and achievements.
- ❒ Meet all requirements, such as time in rate and mandatory correspondence courses.
- ❒ Successfully complete service schools, as required.
- ❒ Get your commanding officer's recommendation.
- ❒ Meet all physical readiness standards outlined in OPNAVINST 6110.1C.

Computing Your Final Multiple

Factor	Exam Paygrade	Computation	E-4, E-5 Max. Points (%)	E-6 Max. Points (%)	E-7 Max Points (%)
Standard Score (SS)	E-4 to E-7	Indicated on Exam Profile Sheet	80 (35%)	80 (30%)	80 (60%)
Performance Factor	E-4, E-5, E-6 E-7	PMA x 50 -130 PMA x 50 -108 PMA x 13	70 (30%)	92 (35%)	52 (40%)
Length of Service (LOS)	E-4, E-5, E-6	(TAS - SIPG)+15 (TAS - SIPG)+19	30 (13%)	34 (13%)	
Service in Pay Grade (SIPG)	E-4, E-5, E-6	2 x SIPG + 15 2 x SIPG + 19	30 (13%)	34 (13%)	
Awards	E-4, E-5, E-6	Values Listed in Para. 418 AdvMan	10 (4.5%)	12 (4.5%)	
PNA Points	E-4, E-5, E-6	As Indicated on Past Profile Information	10 (4.5%)	12 (4.5%)	
Max. FMS Possible			230 (100%)	264 (100%)	132 (100%)



He thought he was going to die. It was just that simple. Pinned by wreckage in a rapidly flooding compartment below the main deck of his sinking ship, the young petty officer turned to his mates and said good-bye. No one will ever know for sure, but he probably hoped it would all be over quickly.

Story by LCDR John Kirby,
painting by SN Michael Noeth

"Remember the *Maine*" 100th Anniversary

Pulling the Load

A Hero of the Maine



Photo courtesy of U.S. Navy Historical Center

Maine (BB 2), a second-class armored battleship, was laid down at the New York Navy Yard Oct. 17, 1888. Here, she is depicted just four hours prior to the huge explosion that ruptured the forward part of the ship.

But fate had another plan for Master-at-Arms 3rd Class John B. Load, of London. He would not perish. Not only did he live to tell the tale of the infamous explosion aboard the battleship *Maine* (BB 2), he managed to save numerous other lives before jumping into the murky waters of Havana Harbor, Cuba. *Maine* sank beneath his feet Feb. 15, 1898. If you think "Honor, Courage and Commitment" is just some new catch phrase, then the story of John B. Load is one you should read.

"The atmosphere was heavy; the easterly trade wind had fallen flat. Occasionally, I heard the sound of a passing ferry boat. Otherwise, the harbor was very quiet." That was how CAPT Charles D. Sigsbee, commanding officer of USS *Maine*, later described that fateful Tuesday evening.

His ship lay at anchor in Havana, Cuba, after arriving Jan. 25, 1898. It was sent there to protect American lives and property during the Cuban revolt against Spanish rule, but the ultimate purpose *Maine* would serve was to catapult the country into war with Spain.

Around 9:30 p.m. that night, as Sigsbee himself was putting the finishing touches to a letter he had been writing, Petty Officer Load was preparing to turn in for the evening. After a brief conversation with the duty Master-at-Arms, Load proceeded to his hammock, slung outside the armory door underneath the middle superstructure. He removed his shirt and looked around at his sleeping mates. Ten minutes later, their slumber and the quiet of the evening would be shattered by an enormous explosion and the screams of dying men.

At exactly 9:40 p.m., standing by the armory door, Load saw what he later described as "a red flame outside the ship. It seemed as if ... a small boat had struck the ship at first. She seemed to tremble, and then the whole deck where I was standing seemed to



Photo courtesy of U.S. Navy Historical Center

View of the battleship's wreckage in Havana's harbor, Cuba, in 1898.



Photo courtesy of U.S. Navy Historical Center

Master-at-Arms 3rd Class John B. Load shown here (row 3, far right) among the crew of the battleship *Maine* prior to the fateful day of the infamous explosion.

open, and there was a flash of flame came up. It was as if someone had taken a revolver and fired it close to your face," he recalled. Having been raised on a farm, Load likened the terrible noise to that of a wagon with a lot of iron being dumped into a hole.

The next thing he knew he was somewhere beneath the main deck, trapped in a flooding compartment. The explosion must have sent him sprawling into an open hatch. However it happened, he knew *Maine* was sinking. Around him he could hear the voices of other men: Gunner's Mate 3rd Class James Williams, Landsmen Joseph H. Kane and Marine Private William McGuiness. They, too, were pinned down by debris and couldn't get out.

Initially, Load believed that a boiler blew up, because the water was so hot and the smoke was so thick. He wasn't sure whether they would drown first or suffocate to death. "It felt as if cotton were in our mouths," he said. Coughing violently, the four men drank the filthy harbor water for relief. It was then that Load turned to Kane and told him he had given up hope. As Kane confessed similar feelings, a second explosion rocked the ship. This one freed them from the wreckage, and all four managed to escape through an opening to the port side of the upper superstructure.

Reaching the main deck, Load noticed that the awning was on fire with several injured men laying upon it. Over the groans and cries for help, he heard someone call his name. It was Ship's Cook 1st Class George Schwartz, a native of Germany. Load quickly threw him a line and pulled him to safety. Then he did the same for Marine Privates Joseph Lutz and C.P. Galpin, as well as two or three other Sailors.

Maine was going down faster now, and

"She seemed to tremble, and then the whole deck where I was standing seemed to open, and a flash of flame came up."

-- MA3 John B. Load

Load realized the need to get the injured off. A boat from the American steamer City of Washington attracted his attention, and he called to it. But Naval Cadet Amon Bronson, boat officer for one of *Maine's* own whaleboats, intervened and offered to help. "Throw me your painter!" yelled Load. He caught it, made it fast to a nearby cradle and used it to lower several men into the water. Lutz then called to him. "Give me some help here," he shouted. "There are two men dying!" Load rushed to his side and helped get the two critically hurt Sailors to the rail. Once there, they simply lowered them into the water. Given the extent of their injuries, there was no better way. Both men, Seaman Andrew Erikson and Seaman Carl Smith, would die in a Havana hospital three days later.

Once he was satisfied that he could do no more, Load prepared to abandon ship himself. While looking for a favorable spot from which to jump, he slipped and fell into the churning harbor. He was picked up shortly thereafter by a Spanish shore boat, which itself had rescued two other *Maine* Sailors.

The battleship *USS Maine* went down with more than 250 of its crew, most of whom were killed in the initial explosion. Many Americans blamed the sinking on Spanish treachery, although there was never enough evidence to prove it. A scant two months later, spurred by the public's cry to "Remember the *Maine*," the United States declared war on Spain. It was a short war, but one which, according to historian John Edward Weems, marked "the final collapse of the Spanish Empire and the emergence of the United States as a world power ... ." To this day, no one really knows exactly what caused the explosions, but common belief is that they resulted from the spontaneous combustion of coal stored in bunkers adjacent to the powder magazine.

Master-at-Arms John B. Load, having resigned himself to death, survived one of the worst naval disasters of his time uninjured. And, although little is known of what became of him after that horrible winter's night in Havana, two things are certain: He became an authentic American hero, risking his own life for those of his shipmates, and he proved that even 100 years ago, Core Values like Honor, Courage and Commitment were held dear by proud American Sailors. ⚓

Kirby is the head of still media, Naval Media Center, Washington, D.C.

Editor's Note: Information for this story was obtained from John Edward Weems' *The Fate of Maine* (Texas A&M University Press, 1992) and *A Ship to Remember: Maine and the Spanish American War* (William Morrow and Company, 1992) by Michael Blow.



Photo by PHAN Lena Gonzalez

Maine Memorial is located in Arlington Cemetery, Arlington, Va.

African American CPO Survives *Maine* disaster

Story by LCDR John Kirby



Photo courtesy of U.S. Navy Historical Center

Chief Gunner's Mate John Henry "Dick" Turpin survived two shipboard explosions during his 30 years in the Navy. Turpin retired in 1925.

Another noteworthy survivor of *Maine (BB 2)* was then-mess attendant John Henry "Dick" Turpin. Turpin enlisted in the Navy Nov. 4, 1896, and reported to *Maine* shortly after his initial training.

He had been sitting near the icebox in the wardroom pantry, talking with two other mess attendants, when the first explosion occurred. He immediately headed topside but somehow blundered into the messroom. There he encountered an officer, Lieutenant Friend Jenkins. Jenkins asked Turpin which way they should go, and Turpin replied that he wasn't sure. The lieutenant opted to go forward, while Turpin waded through chest-deep water aft to where he thought a ladder might be. "Then the whole compartment lit up," recalled Turpin. "The whole compartment where the torpedoes were lit right up, and I saw Mr. Jenkins throw up both hands and fall, right by the steerage pantry." Jenkins was dead.

By now the water had reached Turpin's chin. It was tough to make headway, but he kept struggling aft. When he got to where there should have been a ladder, it was gone. Made of wood, it had probably floated away. Suddenly, he felt a rope touch his arm, and he grabbed at it. Within seconds, he had pulled himself up to the main deck.

Once topside, Turpin climbed a ladder to the poop deck where he met Lieutenant George Holman. Holman, believing the ship to be under attack, ordered Turpin below to recover some cutlasses. "Aye, aye, sir," replied the mess attendant, and down he went. He didn't get very far. Well before he reached the after gun room, the water began to rise swiftly around his head. Somehow, Turpin managed to reverse course, get topside and jump overboard. He was picked up by a rescue boat minutes later.

Seven years later, Dick Turpin would also survive an explosion aboard USS *Bennington.* In 1917, he was appointed as chief gunner's mate aboard USS *Marblehead.* Turpin retired Oct. 5, 1925, after almost 30 years of naval service. ⚓

Kirby is the head of still media, Naval Media Center, Washington, D.C.



➤ MM2 Linton Foster checks OBA canisters for fire fighting students.

▼ DC2 Vincenza Black teaches hose team tactics to Surface Warfare Officer School (SWOS) students.



Preparing

Story and photos by PHC(SW) John E. Gay

Secure from Drill" echoes off the steel bulkheads, bounces down dark passageways and reverberates through the hollow sounding 1MC.

Stripping off the soot-coated face mask of an oxygen breathing apparatus, a lieutenant stares blankly across the room — his face flushed red, khakis drenched in sweat and his body barely upright — drained of energy from the 150-degree heat.

From an air-conditioned control booth steps an enlisted fire fighting instructor. His coveralls are neatly pressed and the chevrons on his collars are polished to a bright sheen. He is one of the thousands of enlisted instructors who train Navy leaders for the fleet.

"By putting them through the same training as enlisted Sailors, officers understand how important each step is and just what teamwork is to winning the fight."

— DCC Roger Hulbert

The Navy trains hundreds of officers each year in Newport, R.I., teaching them the skills required to become a Sailor. The Navy relies on enlisted men and women who have served aboard ships and squadrons and who have mastered their technical skills.

Surface Warfare Officer's School (SWOS) in Newport introduces junior officers to many skills. It is hoped some of the skills will never be used except in training.

"The hardest part about teaching officers is getting them to understand how important it is to be a good division officer," said





▼ DCC Antonio Farese teaches the portable hydraulic access recovery system (PHARS) to department head student.

our leaders

Machinist's Mate 1st Class (SW) James Chandler, a basic steam instructor. The new officers are instructed by chiefs and senior petty officers who teach more than technical skills. They teach leadership.

Practical skills at SWOS are taught in simulators. Gray boilers, brass gauges and tubing stuffed into the overheads, give the mock-up a ship-like feel. They are so detailed, the only thing missing is the heat and side-to-side roll of waves.

"The SWOS engineering room is modeled after a frigate, but it's the coolest fire room I've ever been in," joked Chandler.



▲ MM1(SW) James Chandler explains boiler light-off procedures to a class of engineering officers at the school's frigate mock-up.

Surface warfare students learn more than engineering systems, they also must know how to handle a crisis when general quarters sounds.

"We give our officer students an introduction on how drills should be run when they get out to the fleet. We want them to experience the heat and the feel of wearing the bulky fire fighting equipment," said Chief Damage Controlman Roger Hulbert, an instructor at the Fire Fighting School.

"By putting them through the same training as enlisted Sailors, officers understand how important each step is and just what teamwork is to winning the fight," said Hulbert.

Training is made as real as possible and the adren-



➤ Two students put a clamp over a damaged fire main at the *Buttercup* damage control flooding simulator.

aline is high. After an early morning practical knowledge class, each student is given a demonstration of the equipment and its use. They form into teams and fight a real blazing inferno.

"I like teaching the damage control assistance class the best," said Hulbert, "I know how important their job is, and I have a good chance of working with them again in the fleet. I want them to be as ready as possible."

After students complete fire fighting training, it's off to *Buttercup*, a damage control flooding simulator. Students learn to stop hull ruptures, repair split water mains and dewater a flooded compartment.

"Each class must develop [their] skills and work as a team," said MM1 Steven Smith, leading petty officer at *Buttercup*.

Students usually fail their first test. The ship, capable of flooding to six feet, sinks. Sailors are then pulled up the hatch by their shipmates and they shake the water from their soaked uniforms in frustration. After a debrief and advice from *Buttercup*'s staff, the general quarters alarm is sounded once more.

"Incoming missile! All hands brace for shock."

A thunder-like rumble gives confirmation that the missile has impacted. *"Direct hit, port side! All hands relax brace. Investigators out."*

Inside the compartment, water surges in every direction. The deck floods with two feet of water and quickly rises.

Two Sailors slide through the scuttle. From every direction water pours in making visibility poor. Assessing the damage, the pair reports to the scene leader.

Several teams charge into the compartment, each with a separate mission. Some fight the downpour from above and attack the split water mains. Others search for shoring, that is now floating in the flooding space. They apply pressure to the bulkhead and block the gaping hole in the compartment. Topside, others are setting up 1,250 portable water pumps to suction water from the spaces.

When the Navy trains its leaders, it turns to the subject matter experts — enlisted Sailors with the responsibility to guide officers and ensure the Navy team is the best trained in the world.

"We teach each class how to use various types of equipment found in repair lockers to combat flooding," said Smith. "The team must stop the flooding before they can dewater the space. If they work together they will win. If not, they end up swimming."





▲ HM3 David Shootenbauer, an instructor from Naval Hospital Newport, walks LT Bryan Ponce through basic CPR. Ponce is with NROTC, Miami University, Oxford, Ohio.

Smith said the training teaches officers how important every team member is and how they must organize the damage control team to keep the ship afloat.

Other Newport Sailors teach hands-on life saving skills as well.

At Naval Hospital Newport, Hospital Corpsman 3rd Class David Shootenbauer demonstrates basic cardiopulmonary resuscitation (CPR). "It isn't much different teaching officers than enlisted Sailors," said Shootenbauer.

"At first I was nervous, especially teaching doctors and nurses. But, once I learned the officers wanted to gain the knowledge from these classes, it made my job easy."

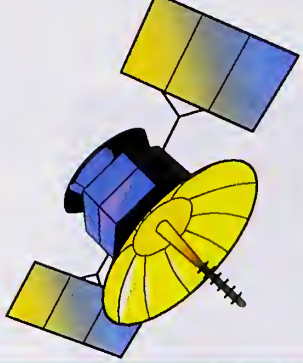
Walking students through the steps of life support, Shootenbauer continuously quizzes their knowledge. "I want them to think about the next step when doing CPR. This is a really important class, but I hope none of my students have to use it."

When the Navy trains its leaders, it turns to the subject matter experts — enlisted Sailors with the responsibility to guide officers and ensure the Navy team is the best trained in the world. ⚓

Gay is a photojournalist assigned to the U.S. Naval War College, Newport, R.I.



◀ Students usually fail their first test in the *Buttercup* damage control flooding simulator and the "ship" sinks.



LIVE

How Direct to Sailor (DTS) works

A broadcast signal originating from the Armed Forces Radio and Television Service - Broadcast Center (AFRTS-BC), March Air Force Base, Riverside, Calif., is beamed up to three commercial satellites positioned around the globe -- one floating in space over the Pacific, one over the Atlantic and one over the Indian ocean. As long as ships at sea are within the signal's "footprint", they can pick up the signal via a satellite receiver and distribute it through the ship's Shipboard Information, Training and Entertainment (SITE) system to the TVs on board.

What TV-DTS provides

DTS will provide timely news, information and entertainment to the fleet through two TV channels; AFRTS News/sports channel and AFN Direct to Sailors, a modified version of Armed Forces Network. DTS will also provide three radio channels, two stereo-quality music channels and one talk radio channel. A print data channel will also be included in the DTS. Ships will be able to receive timely transmissions of public affairs products such as the "Current News Early Bird," "Navy Wire Service," "Stripes Lite," Navy News Service and a Navy edition of the *New York Times* Fax.

Where TV-DTS is right now

There are two DTS test ships with the prototype equipment installed: USS *Tarawa* (LHA 1) and USS *Guam* (LPH 9). But other ships are receiving the TV service only, by using the dishes and decoders supplied by Naval Media Center, Washington, D.C.

Where TV-DTS will be in the future

Ships will receive the worldwide signal through a 1.5m antenna. By the year 2000 surface combatants, amphibious ships, auxiliaries and aircraft carriers will have DTS.

Story by JOC Doug Hummel

There was just as much anticipation and excitement running through the decks of this mighty warship a few minutes before kick-off of the Army-Navy football game as there was on the field in the meadowlands. For the first time in Navy history, a ship at sea was going to be able to watch the Army-Navy game live via the Direct-To-Sailor Television System (TV-DTS).

Sailors of the USS *Guam* (LPH 9) and Marines from the embarked 24th Marine Expeditionary Unit (special operations capable) had just completed another major evolution as they hosted the Secretary General of NATO and almost 100 other high ranking NATO and military leaders for the final event of NATO Sea Day. Sailors and Marines gathered around television sets with their favorite pre-game snacks looking forward to something they hadn't done since the start of their six-month deployment in October -- watch a live football game.

"It was great!" exclaimed Operations Specialist 3rd Class Adam Dearing of Youngstown, Ohio. "It's really relaxing to be able to come off watch and see a live game. Before, we watched taped games and already knew the outcome of the game which really takes something away from the game. But now the excitement is back!"

Mess decks, berthing spaces, the wardroom and staterooms were jammed packed as football-crazed Sailors and Marines huddled together to cheer on the Midshipmen. The only sounds you could hear were the yells and screams of happy sea servicemembers celebrating big play after big play by the mids.

According to Electronics Warfare Technician 2nd Class (SW) Jack McNeese of Indianola, Ill., watching this game and being able to see other sporting

TV & Radio Direct to Sailors

events in the future will have a huge effect on his morale. "It was awesome!" he said. "It was like home and getting together for the big game!"

The new DTS signal is a state-of-the-art digital satellite system that now provides live sports, entertainment, news and other informational programming to the crew of the "Mighty 9." The gear was installed just before *Guam* departed its home port of Norfolk for the current deployment.

Guam was off the coast of Naples, Italy, when *Guam* first locked on to the signal on the evening of Dec. 4, one day after the newly launched satellite moved into position and started beaming down the signal to the entire Mediterranean area.

"This is a technological breakthrough that creates high morale in the crew," stressed CAPT William J. Luti, commanding officer of USS *Guam*. "Being able to have this system up just in time for the Army-Navy game added that extra special touch of satisfaction and excitement to the crew. It's a wonderful thing the Navy has done to bring this system to the fleet.

Thanks to DTS, the crew of *Guam, and by 2001, most of the fleet,* will now be kept up to date on the happenings in the world of sports as well as other world events by watching the 24-hour newsports channel which is one of the two channels that the ship is currently receiving from the AFRTS Broadcast Center in Los Angeles. The other channel, a modified version of the Armed Forces Network, provides some sports and news programs but features the same entertainment programming that

"... I think the Navy is really trying to take care of us!"

-- OS3 Adam Dearing

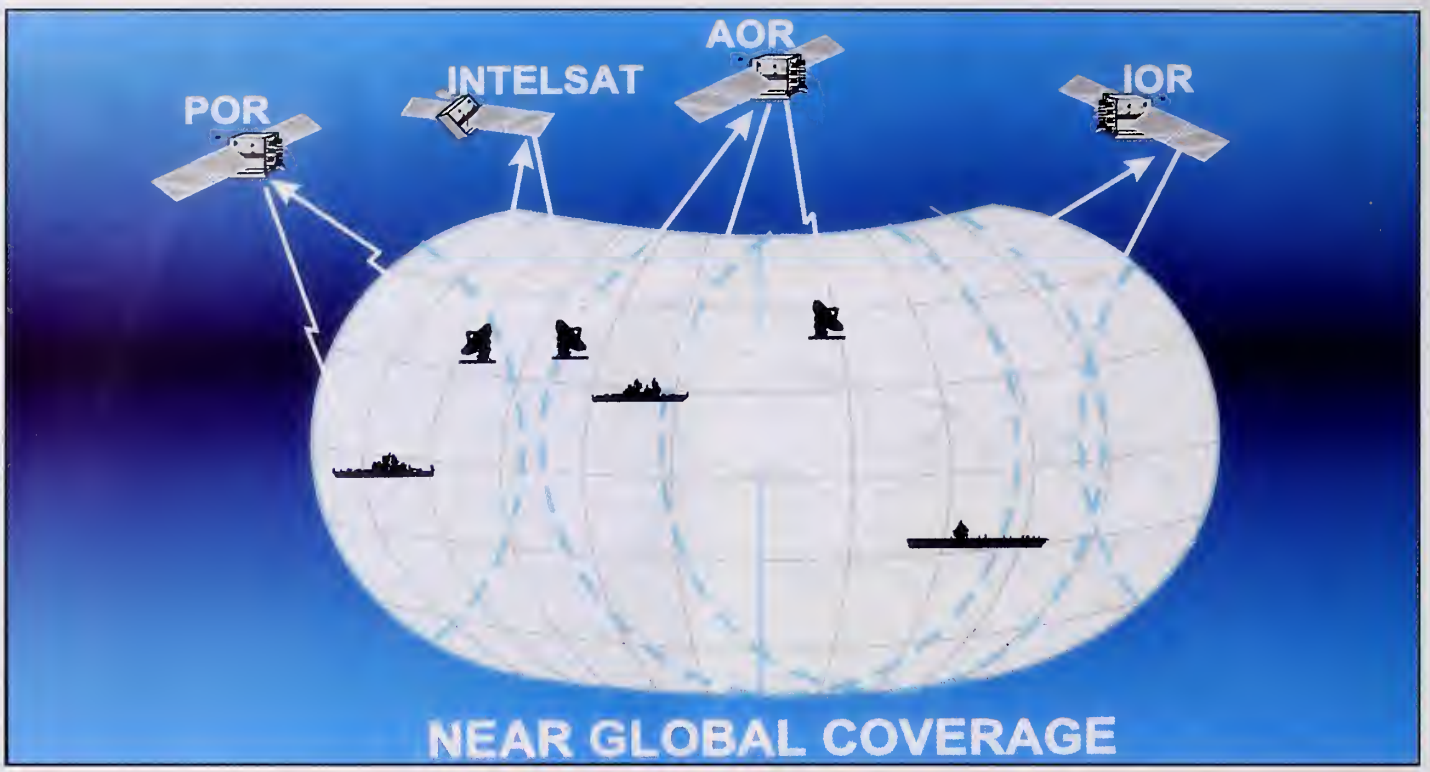
USS *Guam* (LPH 9) and USS *Tarawa* (LHA 1), are the two test beds for Direct To Sailor Television. This service is provided by a broadcast signal from Armed Forces Radio and Television Service.



Photo by Kris White



Photo by PHC(AW) Michael L. Dale



The near global coverage of DTS is made possible by three satellites in the Pacific, Atlantic and Indian Oceans.

Sailors are used to seeing back home. Plus, instead of watching these sitcoms and drama shows weeks, sometimes months, after they aired in the states, members of the hard working Navy-Marine Corps team can now watch their favorite shows just a few days after they air back home.

"If you can't be home, you might as well bring home to us," said Lance Cpl. Johnnie T. Rowell about watching the new programing on DTS with more than 1,500 of his closest friends. "It feels good because it gives you that home environment because you can watch sports at the same time as your family is watching it on television. Having this system on board will actually help me have a good time and enjoy the cruise a little bit more because sports is a big part of all our lives and we enjoy watching sports," Rowell said

Dearing agreed. He looks at DTS as providing a slice of home that he had been missing since deployment. "It makes it like we're closer to home, it doesn't make it so bad that we're away from home for six months. I think the Navy is really trying to take care of us!"

The boost in the crew's morale that this new quality of life item has provided is already evident.



Photo by PHAN Rick Williams

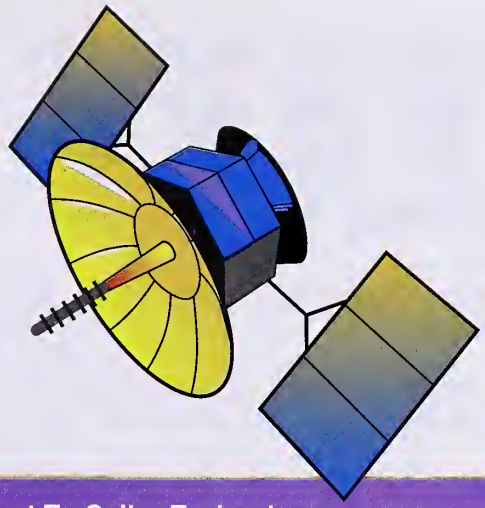
Sailors and Marines cheer as the Naval Academy's football team makes a touchdown during USS *Guam*'s live viewing of Direct To Sailor (DTS) television broadcast of the Dec. 6 game while *Guam* cruised the Mediterranean Sea.

DTS TV Programming

Here's a quick look at some of the many shows available on both channels of DTS TV.

The News/Sports Channel
- Live Sports
- Good Morning America
- Sportscenter
- 48 Hours
- Dateline
- 20/20
- ESPN & ESPN2

AFN-Direct To Sailor
- Oprah Winfrey
- Star Trek: Deep Space 9
- Wheel of Fortune
- Today
- WWF Superstars
- Jeopardy
- Home Improvement
- Mad About You
- Drew Carey
- Frasier
- 20/20
- Tonight Show with Jay Leno
- Saturday Night Live
- Late Show with Dave Letterman



Direct To Sailor Technology:

When you think of the Navy's high-tech weaponry, what comes to mind? The dangerously quiet Seawolf attack submarine? The long-range accuracy of the *Tomahawk* cruise missile? How about the versatile F/A-18 E/F *Super Hornet*?

They're all correct. But in this day and age where information equates to power, the Navy's most important weapon is an informed Sailor.

Informing Sailors is where the advanced technology of Television -- Direct To Sailors (TV-DTS) program comes into the picture. TV-DTS is a quality-of-life initiative that will change the way Sailors living aboard ships get news and information at sea.

"People are walking around the ship smiling and very, very impressed that we have this capability," said Luti. "I believe firmly that taking care of our troops is job one. This his system is a dramatic step forward in taking care of our troops."

It's not known if the extra 1,500 screaming fans had an affect on the outcome of the game but the final score helped the morale of the crew as well. Navy 39, Army 7.

Hummel is a journalist assigned to USS Guam *public affairs office.*



Photo by PHAN Rick Williams

Marines attached to USS *Guam* (LPH 9) Amphibious Readiness Group sit and enjoy the live Army/Navy game from their berthing area.

HEAVY METAL

Giving birth to 95,000 tons of diplomacy

Story by JOC Kevin A. Mills

Bringing one of the world's largest naval combat vessels to life is like constructing a modern-day version of one of the Seven Wonders of the World. For the Navy's newest aircraft carrier *Harry S. Truman* (CVN 75), that means employ-



Photo by Newport News Shipbuilding

▲ An aerial view of the modules making up *Harry S. Truman* (CVN 75) prior to the completion of the ship's hull.





PCU *Harry S. Truman* (CVN 75)

Photo by LT Scott M. Allen

From Blueprint to Delivery ...



Photo by LT Scott M. Allen

◄ *Truman's* 547-ton island is lowered onto the flight deck of the Navy's newest nuclear-powered aircraft carrier as Sailors below look on.

▼ The ship's bow dangles in mid-air before being fitted into place by huge cranes at the Newport News shipyard. The bow is just one of 190 "pieces" designed to fit together into a highly complex, technological puzzle called modular construction.



Newport News photo

ing more than 3,100 shipyard workers at the height of its construction, using 1 million pounds of aluminum, 60,000 tons of steel and connecting 190 modules weighing up to 870 tons each. It takes an average of five years to construct a carrier from blueprint to delivery.

It took months to design *Truman's* more than 3,300 spaces. The contract was awarded to Newport News Shipbuilding in June 1988 and steel fabrication began April 1989.

Even before the keel was laid in November 1993, shipyard workers were constructing segments of the ship. These modules were then set on the keel and welded together.

"It's put together like a huge jigsaw puzzle," said Harold Paxton, Newport News Shipbuilding Manager of Carrier Construction. "The superlifts (modules) form the structural makeup of the ship. We start off with the mid-body section, then we continue building aft."

About 18 months before the ship was



U.S. Navy photo

April 25, 1989

Construction of *Harry S. Truman* (CVN 75) begins at Newport News shipyard.

▲ A civilian welder sends sparks flying as he guides a metal support bracket into place. About 60,000 tons of steel and a million tons of aluminum went into constructing *Harry S. Truman*.

➤ A 90,000-pound "dead load" vehicle is catapulted off the *Truman's* flight deck during testing. Once fully operational, all four steam-powered catapults will be able to safely launch aircraft at a rate of more than 40 an hour.



Photo by LT Scott M. Allen

June 1993

Sailors begin reporting aboard as the first members of the *Truman* crew.

Nov. 29, 1993

***Truman's* keel is laid. The keel is the ship's backbone where massive steel beams run stern to stern.**

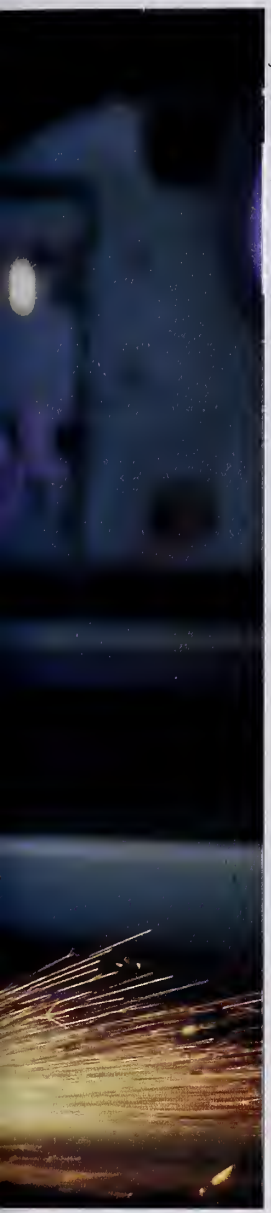


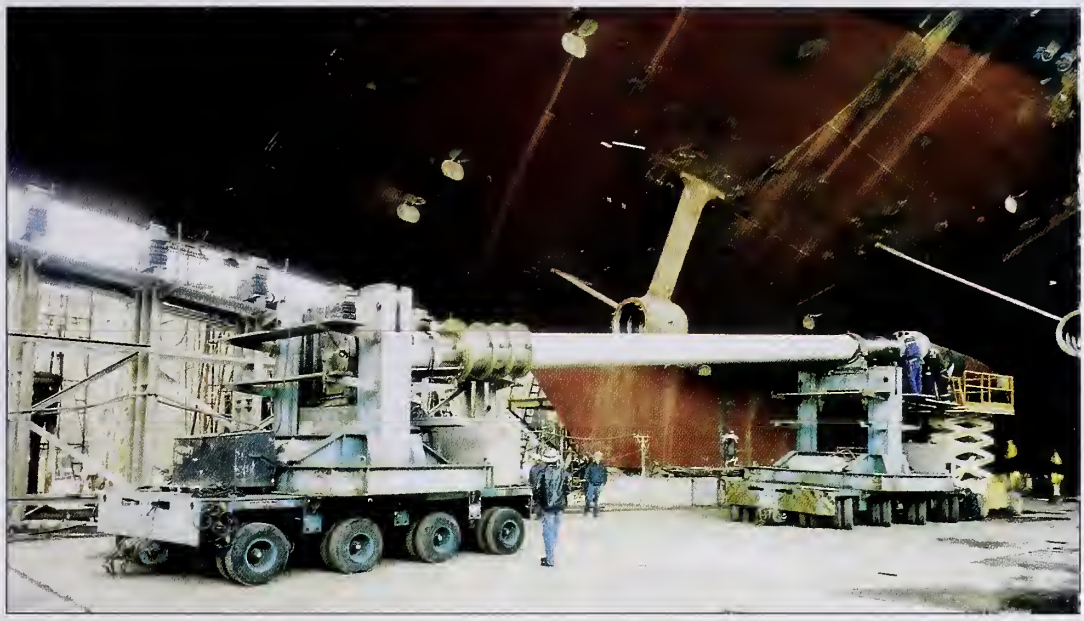
Photo by LT Scott M. Allen



Newport News photo

◄ Thousands of electrical lines twist and turn their way through the ship during construction. The wires power equipment used to build the Navy's newest nuclear-powered aircraft carrier.

▼ With 70 percent of *Harry S. Truman* complete, workers from Newport News Shipbuilding install a section of the shaft that turns one of the ship's four screws.



Newport News photo by Chris Oxley

launched and christened, shipyard workers continued to build forward and up to the flight deck, continually adding parts to the puzzle. The ship has seven decks below and 11 decks above the hangar bay. Six months before launching, the ship was structurally complete, minus the island house which was added in July 1996. The island completed the transformation of a floating hull with a flat top to that of a high-tech combat vessel. Total dry-dock construction lasted nearly three years.

Preparing the ship to actually touch water can be a daunting task. An aircraft carrier that displaces 65,000 tons of water at launching is not like taking your motor boat to the local lake on the weekend. There are many factors that have to be considered.

"We have to pick a launch date based on tide and moon conditions," said Paxton. "If we had missed our launch date in September 1996, it would have been about six weeks later before we could have launched it again during another window with the

Photo courtesy of Newport News Shipyard



Sept. 7, 1996

Ship christened. *Harry S. Truman* (CVN 75) in a ceremony at Newport News Shipyard.

Life of a Carrier

1959	USS Independence (CV-62)	1998
1961	USS Kitty Hawk (CV-63)	2008
1961	USS Constellation (CV-64)	2008
1961	USS Enterprise (CV-65)	2013
1968	USS John F. Kennedy (CV-67)	2018
1975	USS Nimitz (CVN-68)	2025*
1977	USS Dwight D. Eisenhower (CVN-69)	2007-2027
1982	USS Carl Vinson (CVN-70)	2012-2032
1986	USS Theodore Roosevelt (CVN-71)	2016-2036
1989	USS Abraham Lincoln (CVN-72)	2019-2039
1992	USS George Washington (CVN-73)	2022-2042
1993	USS John C. Stennis (CVN-74)	2023-2043
1998	Harry S. Truman (CVN-75)	2028-2048
2002	Ronald Reagan (CVN-76)	2032-2052

* Scheduled for overheul and nuclear refueling in 1998, adding about 25 years to its lifetime.



Photo by LT Scott M. Allen

tide water high enough to get the ship out of dry dock."

After the shipwas floated in the dry dock, the 32-foot draft of the carrier had a mere 10 inches of clearance between the ship and blocks it was sitting on. During the construction process, there is another building sequence taking place - forming a precommissioning crew.

"The shipyard is building a ship, I'm building a crew," said CAPT Tom Otterbein, commanding officer of PCU *Harry S. Truman* (CVN 75). "It is essential the crew is prepared to take the ship to sea as a valuable component of the active-duty force."

The process of building a precommissioning crew also starts very early. Almost three years before commissioning, a unit is formed. In the case of *Truman*, the first crew members arrived in November 1995. Since that time, the crew has grown to approximately 2,000 officers and Sailors, roughly two-thirds of the ship's eventual crew size.

A large part of the crew-building process comes in the form of training.

"By definition, precommissioning duty is training," said *Truman* administrative officer, LCDR Jim Hummel. "We are taking possession of a ship built from the ground up, and we need to have the crew trained to run it."

"The training my crew is receiving on other ships in the fleet is crucial to our ability to take charge of the ship," said Otterbein. "We have Sailors under way with other carriers so they can learn what their job will be once we get commissioned."

Hummel added that the crew arrives in several phases. "There are four nucleus and three balance phases. The first group contains one officer and 17 enlisted Sailors. Basically, they arrive and turn the key and turn the lights on so people know there is now a precommissioning crew."

Enlisted ratings in phase one included yeomen, hospital corpsmen, storekeepers, ship's servicemen and electronic warfare technicians.

Constructing a ship almost as long as the Empire State Building is tall takes careful coordination.

"The job of construction is made easier through the teaming of three organizations: the men and women of Newport News Shipbuilding and Drydock Company, the Sailors of Supervisor of Shipbuilding, and my



Newport News photo by PH1(NAC) J. Slaughenhaupt

Sept. 13, 1996

PCU *Harry S. Truman* launches from drydock for the first time.

▲ Tugboats from Newport News shipyard guide the massive 90,000-ton aircraft carrier into position for upcoming catapult "dead load" testing.

crew," Otterbein added.

"These three organizations work together to 'build quality into the ship' to ensure that we deliver the most capable carrier possible."

Industrial components even actor Tim Allen would envy are used in constructing the ship. Cranes rated up to 900 tons move the massive superlifts into position. They also lift and place the island house, which weighs in at 560 tons, on the completed flight deck. *Truman's* four propellers stretch a tape measure 21 feet across and tip the scale at 50 tons each.

Certainly, constructing the ancient Egyptian pyramids was a major undertaking and technological marvel then and now, but there you couldn't serve more than 18,000 meals a day. Nor could you find accommodations for over 6,000 men and women, 2,000 telephones, the ability to produce 400,000 gallons of drinkable water. Nor are they the mobile symbols of American resolve, capable of launching more than 80 combat aircraft at a moment's notice. ⚓



U.S. Navy photo

Mills and Allen are assigned to PCU Harry S. Truman*'s public affairs office at Newport News Shipyard.*

May 1998

Acceptance trials are scheduled to begin. This is when the Navy tests its newest aircraft carrier at sea.

CINEMA AT SEA

Coming to a ship near you!

Story and photos by USS *Carl Vinson* public affairs office staff

Thanks to the Fleet Recreation Initiative (FRI), Sailors aboard USS Carl Vinson (CVN 70) now have the new Cinema-at-Sea Initiative (CASI) movie system.

"We can hook up VCRs and digital video disc players, get output from cable television stations and satellite channels, and even connect a computer hard drive to the system," said Electronics Technician 1st Class James Ryan of Stockton, Calif. Ryan manages *Carl Vinson*'s Cinema-at-Sea program as part of the ship's Morale, Welfare and Recreation (MWR) program.

According to Ryan, the system shows off its full capabilities every time Monday Night Football is aired in the cavernous hangar bay of the 1,092-foot ship. "We hook the satellite system connector to the VCR, then hook the VCR up to the projector, and everyone watches together," he said.

Carl Vinson and Carrier Air Wing (CVW) 11 crewmembers had good things to say about the system. "I love this big screen," said Airman Apprentice Bryan Dunsmore of Sparta, Tenn. "It gives everybody a chance to watch television at the same time. It's something to do together."

Senior Chief Aviation Electronics Technician (AW) T.K. Moore, of Strike Fighter Squadron 22, described it as "a good deal." "It's a lot bigger than my TV at home," the Hanford, Calif. native joked. "It's a great idea, and will come in handy while we're out for our six-month Western Pacific deployment.



U.S. Navy photo

The next best thing to the neighborhood movie theater, Cinema at Sea offers Hollywood's latest hits in USS Carl Vinson's hangar bay. This underway theater isn't as dark as commercial movie-houses because of the red-lights turned on during darken-ship periods, but the movies still provide a valuable social event on board.

Movie Call — A Naval Tradition

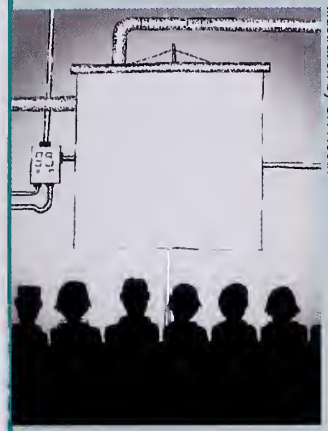
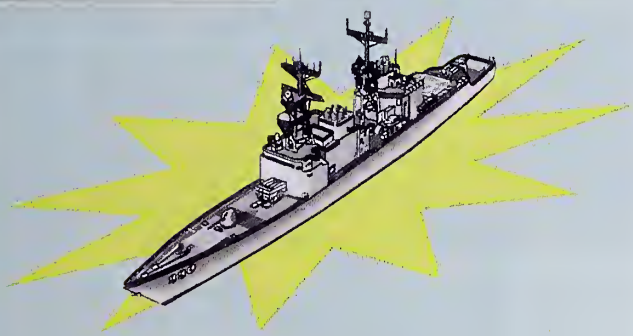


Illustration by SN Noeth

The Navy's Movie Call tradition dates back more than seven decades when the Navy Motion Picture Service (founded in 1920) began distributing movies on reel-to-reel Sailors and Marines serving in the fleet. In the mid-80s, movies starting coming out on videotape and were integrated into each ship's SITE TV system, thus, temporarily ending the tradition. But now, thanks to the Navy's Cinema-At-Sea Initiative, the long-standing tradition of large-screen movie viewing is back!



Who's got it?

Right now 15 ships have received Cinema-at-Sea equipment: USS *Kitty Hawk* (CV 63), USS *Constellation* (CV 64), USS *Enterprise* (CVN 65), USS *John F. Kennedy* (CVN 67), USS *Nimitz* (CVN 68), USS *Dwight D. Eisenhower* (CVN 69); USS *Carl Vinson* (CVN 70); USS *Theodore Roosevelt* (CVN 71), USS *Abraham Lincoln* (CVN 72), USS *George Washington* (CVN 73), USS *John C. Stennis* (CVN 74), USS *Harry S. Truman* (CVN 75), USS *O'Bannon* (DD 987) , USS *Nassau* (LHA 4) and USS *Oak Hill* (LSD 51).

Who's getting it?

Another 12 ships are scheduled to get Cinema-At-Sea by the end of this month: USS *La Salle* (AGF 3), USS *Coronado* (AGF 11), USS *Blue Ridge* (LCC 19), USS *Mount Whitney* (LCC 20), USS *Tarawa* (LHA 1), USS *Saipan* (LHA 2), USS *Belleau Wood* (LHA 3), USS *Peleliu* (LHA 5), USS *Wasp* (LHD 1), USS *Essex* (LHD 2), USS *Kearsarge* (LHD 3) and USS *Boxer* (LHD 4).

To reach the biggest audience of Sailors and Marines, ships with the most personnel are getting CASI equipment implemented first. Cruisers, destroyers, frigates and submarines are all scheduled to be outfitted with CASI between fiscal years 1999 and 2001, subject to funding consideration. Ships will be notified by NMPS when the time comes to installtheir CASI equipment.



U.S. Navy photo

Crewmembers put the big movie screen in place on the hangar bay of USS *Carl Vinson* prior to an evening movie call during a December underway period.

Jennifer Foster, the ship's MWR director, said the $9,000 system is a significant asset for the crew underway. "Using this system gives the crew a chance to relax after they have worked hard, and that's very important. Everyone can have a good time watching movies, and it is great for socializing." Foster said the system is provided to ships from MWR general funds, which allows commands to spend their command MWR fund portions as they see fit to meet other needs of the crew.

Carl Vinson set a precedent by being the first shipboard command to use the system, according to Anita Tornyai, Single Sailor Program manager for BUPERS. "We chose *Carl Vinson* as the model for this system because the ship had just come out of the yards, and they were starting fresh with their work-ups," she said. "So far, I've heard a lot of positive comments from the Sailors."

Before SITE-TV, reel-to-reel motion pictures entertained large groups on mess decks, hangar bays, flight decks, crew lounges, ready rooms and other gathering places on Navy ships. Over the years, the 16mm films were replaced by video tapes used solely on the closed-circuit television systems. Entertainment at sea has come full-circle, now that the 8mm video cassette movies can be aired through CASI, providing a nostalgic feel of that pre-'70s tradition.

"Although the SITE system enables larger numbers of crew members to watch films at one time, many Sailors miss the camaraderie, interaction and participatory nature of a movie call," said Tornyai. "We're doing something to give the Sailors the comforts of home. We think it's a great system and a real morale booster." ⚓

BOOMER LIFE:

Hiding with pride

Story and photos by JO2 Jeremy Allen

From the "Hunt for Red October" to "Crimson Tide," life aboard nuclear submarines has made great movies. In the movies actors play out the script. In the Navy, they aren't acti It'ng -- it's for real.

Life aboard a fleet ballistic missile submarine (or "boomer" as it's called), is unique because the sole mission is strategic deterrence. Everything the crew does is focused around this fact of life.

"It's all about being quiet and remaining undetected," said Sonar Technician (Submarine) 2nd Class (SS) W. Scott Harris, the deck division leading petty officer aboard USS *Kentucky* (SSBN 737). "If America suffered a nuclear strike this sub couldn't be taken out because the enemy would have no idea where we are."

The *Ohio*-class replaced the aging fleet ballistic missile submarines built in the 1960s and is far more capable, according to Harris. It is designed for extended deterrent patrols, quicker replenishments and extended periods between overhauls to 15-plus years. Boomers can carry as many as 24 nuclear-strike-capable missiles with nuclear MIRV (multiple independent reentry vehicle) warheads. Although the missiles have no preset targets when the submarine goes on patrol, the SSBNs can quickly target their missiles if a nuclear response is needed.

The use of a nuclear response has never been needed since creation of the SSBN in 1960. The SSBN provides the nation's most survivable and enduring nuclear strike capability. Boomers were created for a different mission than their counterpart, the fast



▲ LCDR Richard W. Kitchens, executive officer on USS *Kentucky* (SSBN 737) uses the periscope to find and report contacts while *Kentucky* departs Kings Bay, Ga., for a three-month cruise.



▲ USS *Kentucky* (SSBN 737) pulls back in to King's Bay, Ga., after a VIP embark.

▼ SK2(SS) Charles Hamlett, from Reidsville, N.C., drives the boat during manuevering drills under the watchful supervision of Executive Officer LCDR Richard W. Kitchens from Jacksonville, Fla.



attack submarine (SSN). SSN's seek out and destroy enemy threats. But, because boomers carry such long-range firepower, they don't need to go into harm's way. Even if attempted, boomer Sailors have a better chance at not participating in any wars than SSNs because of their "hide with pride" mentality.

"The only war we are ever going to participate in would be World War III," said Harris, a Tulsa, Okla., native. "After that there won't be anything worth coming home to. You're pretty safe on a *Trident* submarine. Since silos can't move and Air Force aircraft can be hit down before getting off the ground, the only nuclear deterrent left is a boomer. This submarine may be in the Atlantic, but you don't know where."

Boomers are assigned certain grids in the ocean to patrol. Even though its exact location is classified, keeping a schedule is easier for them than other parts of the Navy because they patrol by themselves.

"Because our schedule is classified and pretty much set in stone I know when I am leaving and coming back," said Fire Control Technician Chief (SS) Timothy J. Duffy, chief-in-charge of all fire control technicians and missile technicians aboard *Kentucky*. "Since we never go out with a task group, I know what I am going to do for off crew."

An "off crew" is the other 150

▼ MM2(SS) Senen G. Torres-Vazquez, from Puerto Rico, prepares to start USS *Kentucky*'s (SSBN 737) backup diesel engine.



▼ ETC(SS) Gary A. Vickers, from St. Cloud, Fla., and ET2(SS) Chris Johnson, a Seattle native, are secondary plotters for USS *Kentucky* (SSBN 737) during sea and anchor detail while transiting to the Atlantic Ocean.





▲ MS2(SS) Joshua J. Johansen, from Butler, Pa., cuts into the lasagna he made for the crew's lunch.

guys waiting on shore to take the boat back out. Each crew has 150 men and a life cycle of 112 days. "There are two crews on a *Trident* submarine, the blue and the gold," explained Duffy. "We are the blue. Right now the gold crew is in their off crew."

According to Machinist Mate Chief (SS) Paul R. Wierbonics, a former assistant leading chief petty officer aboard *Kentucky*, The blue crew pulls in and turns the boat over to the gold crew "After the gold crew accepts the boat with an exchange of command, the blue crew gets to take some well-deserved R&R. After the blue crew comes back from leave they go directly into 10 weeks of training."

A big part of submariner life involves training. The first goal of sub training is getting a subsurface warfare pin, known as "dolphins."

"As a crew we have to earn our warfare pin in 12 months," said Duffy. "Alhough our average is six to nine months, if you are not qualified in 12 months you can be kicked out of the Navy."

Submariners who don't qualify for their dolphins aren't really part of the team yet. "On your first patrol you are trying to get your dolphins because you don't want to be called a NUB (Non-useful Body)," said Harris. "You don't get to watch any movies until you get your dolphins. The command feels that if you have time to watch movies, then you have time to study."

"When you get to your first boat, you're scared, nervous and have a lot to prove," added Storekeeper 2nd Class (SS) Charles W. Hamlett, *Kentucky's* master-helmsman. "You have to show that you want to earn your dolphins. When you do that, everyone will go out of their way to help you. Whether you're the highest ranking officer or an E-1, everybody depends on each other."

The teamwork spirit submariners emulate underway is carried on shore as well. "We may have two crews, but we all get along," said Hamlett. "If one of the wives of the gold crew need help with moving or repairing something, she will call us. We look after each other whether at sea or at home."



Being home is something all Sailors love to do. But when boomer Sailors aren't patrolling the deep seas, they pride themselves on being the country's most effective deterrent against nuclear war. That is when Boomer Sailors usually get the stereotypical label of being arrogant.

◀ Crew members onboard USS *Kentucky* (SSBN 737) stop to enjoy some great home-style lasagna for lunch on the only enlisted mess deck. Because space is limited, officers and enlisted crew sometimes eat together.



◄ ET2(SS) Terrance D. Brown maintains the master file of High-8 movie tapes for the crew.

"I wouldn't say we are arrogant, just proud of what we do," said Duffy, a Tucson, Ariz., native. "We are an elite force. There are only 18 subs that do what we do. We still follow the standard Navy traditions and rules, but our lives are a bit different and the crew is a lot tighter."

The crew is like a big family. When pressure and stress begin to build, its nice to be able to talk to a caring family member. "It isn't like you can go topside," said Hamlett. "You only have 565 feet to walk around in. The more you hold things in and let things bother you, the more panicky and disgruntled you are going to be."

What keeps the crew from getting disgruntled is sitting down and talking the problem out. "If we see a guy who is upset we let him blow off steam and then, he's fine," said Hamlett. "You don't want to let things bother you to a point that you can't concentrate on your job. Probably the biggest worry here, especially with the new guys, is when the familygrams start coming in and they don't get one."

"Familygrams keep you from going nuts," said Harris. "Each message is no more than 40 words from your wife or family. They can send out a maximum of eight of these periodically throughout the patrol."

Family grams are nice, but it still doesn't erase the fact that communication to and from a boomer is very limited. "If you're interested in being on a sub, read up on it and see what it's like and then talk to some guys to see if you have the will power to handle it," recommended Hamlett, a native of Reedsville, N.C. "There is a lot of time under way so make sure you have the right frame of mind to endure before joining."

Being true isn't what nuclear submarine fiction movies are best at portraying. "I've watched 'Crimson Tide' and 'The Hunt for Red October;' they're nice pieces of fiction, but the situations would never happen. It's kind of humorous to watch these movies," said Harris. "In 'Crimson Tide' they show guys in bunk rooms with loud music on, nobody is loud. You go way out of your way to be quiet on a sub because it all equates to noise. The key comes down to being quiet and remaining undetected. If we get detected we fail."

Allen is a staff writer assigned to All Hands.

▼ STS2(SS) W. Scott Harris, leading petty officer for deck division, tracks a contact on the broadband display in sonar division. The boat has no active radar so the sonar acts as the eyes and ears of the boat.





Time, Talent and Treasure

The YMCA - at your Service

Story by Patricia Oladeinde, photos courtesy of YMCA

Ask any generation-X-er what theYMCA is and you're likely to see an immediate throwing of arms in the air forming huge letters, in conjunction with, tilted body gyrations and lip syncing of the Village People's smash hit "YMCA." But few know that the real YMCA (Young Men's Christian Association) and its subsidiary, the Armed Services YMCA (ASYMCA), have been gold hits for the military since 1861.



Photo by Ann Hawthorne

▲ Reading programs are aimed directly at helping children. Here a Sailor spends his spare time reading this little girl a story.

A spin-off of the YMCA, the ASYMCA is one of the nation's largest nonprofit civilian volunteer service corps. Its work is carried out by a network of branches and affiliated YMCA Associations across the United States, Hawaii, Alaska and in the Republic of Panama and the United Kingdom.

What began as an all-volunteer organization that aided servicemen on the battlefields of the Civil War has continued its mission of serving military service members -- single and married-- and their families.

Back in earlier days, YMCA members were recruited to serve as surgeons, nurses, chaplains and chaplains' assistants while others distributed emergency medical supplies, food and clothing. Many volunteers brought books to servicemen and taught them how to read and write.

Today, you probably won't see volunteers serving on battlegrounds in horsedrawn canteens, but chances are you'll still see them in hospitals, child care centers and outreach centers providing quality programs and services that promote the development of Sailors' bodies, minds and spirits.

From the single's programs to the recreational programs, the ASYMCA aims to strengthen family units and encourage individuals to achieve their fullest potential.

"Our basic focus is to take care of our servicemen and women - primarily paygrades E-5 and below, by offering them free- to-low-cost programs," said retired RADM Frank Gallo, National Executive Director of the Armed Service YMCA. "We don't compete with the USO, Red Cross, Family Service Centers or any other such organization. We're here to assist commands and provide services where other organizations can't, just like in the past," said the Brooklyn, N.Y., native.

The emphasis of service was once focused exclusively on military



Photo by Ann Hawthorne

➤ Single Sailor programs are sprouting up around many bases. An activity such as ping-pong is a great way for Sailors to enjoy themselves.

personnel, but, today, there are programs and services for the family members as well.

"We are not like the local YMCA," said Ralph Blanchard, public affairs officer for the ASYMCA national headquarters, Springfield, Va. "We're better because we offer more than just the physical programs. We have lots of programs to enrich the quality of life for service members," added the Pawcreek, N.C., native. "And we know that if we take care of our military members, they perform their duties better."

As a result of the ASYMCA shifting its emphasis to include family members, outreach activities for preschoolers have become as commonplace as the more traditional recreational programs for military personnel.

"We even try to employ dependents to run the facilities," said Rodney Johnson, family service director for the ASYMCA in Bremerton, Wash. "We're close to 70 percent (employed family members), and we hope to reach 80. We want to show the military we appreciate them and their support in our community."

Community support is crucial to the ASYMCA's success, but it takes special people to run the programs and services.

"Time, talent and treasure, are the three elements volunteers must have if they want to join the ASYMCA team," said Gallo. "You've got to be able to deliver on your promise when you say you will, possess the skills to work and have a deep appreciation for the people you're giving your service. We've been around a long time -- more than 136 years -- which tells me that a lot of people are still delivering on their words," he added.

The ASYMCA operates more than 50 program centers in 20-plus locations on and around military installation in the United States. Each base or facility has it own lineup of programs that are mostly reflective of its community needs.

"The classes offered are great for the kids and adults," said Missile Technician 2nd Class (SS) Patrick Smith, who works out at the Kitsap ASYMCA in Bermerton, Wash. "My kids love Storytime, tumbling, 1-2-3 Grow and ballet. Aerobics and karate are great for the adults," he added.

"Kitsap family YMCA is a great addition to Subase Bangor," said Suzanne Grandlois, a military spouse. "It provides jobs for spouses and the on-site day-care is a money saver. The programs fit the whole family. The after-hours facility availability is wonderful for support groups because it helps to maintain stability when our spouses are gone," she said. "The wonderful caring staff ensures everything runs well and everyone stays happy."

As the ASYMCA heads into its 137th year, there's no doubt it will continue to provide services and programs to its service members and their families. And whether the YMCA is remembered as the '70s song sung by the guys who dressed up in occupational costumes or whether it's remembered as the solid gold military-support organization it's always been, the name will remain at the top of the charts because of the dedication and service it. ⚓

Oladeinde is a staff writer assigned to All Hands.

YMCA and ASYMCA: INFORMATION and TRIVIA

➤ *Trivia question.*
Who is the boy, fifth from the left in the front row. Hint: He played in this YMCA boys band in Dixon, Ill., in 1924.



A number of innovative projects created by the YMCA during World War I were destined to become institutionalized:

1. Overseas entertainment for the troops — would be carried on by the United Services Organizations (USO), an organization the YMCA would help create some 20 years later.

2. Overseas "exchanges" for the convenience of the troops, also established by the YMCA, would be carried on by the services themselves.

3. Educational scholarships for veterans would give rise to the GI Bill

4. The concept of R&R for battle weary personnel would become routine in future conflicts.

ANSWER: Ronald Reagan who later became the 40th President of the United States.

Where does the ASYMCA obtain its funding?

The ASYMCA does not receive any federal subsidy. Sources include:
- United Way/Combined Federal Campaign (CFC)
- Partner Memberships (donations)
- Endowment Allocation
- Corporate Donations
- Government Contracts
- Membership Dues/Program Fees
- Donated Services and Materials
- Social, Recreational and Cultural Program Fees
- Residence and Related Services
- Sales of Materials and Services

Programs vary between facilities. Here is a sampling of programs and services that are provided in support of the military community.

♦ Drop-in centers both on and off base
♦ Trips and tours
♦ Service on Saturdays program (S.O.S)
♦ Single Sailors' program
♦ Outreach centers
♦ Contract services to meet special command needs
♦ Counseling services
♦ Support during family separations that are created by military duties
♦ Training in parenting skills
♦ Home visitations
♦ Child care
♦ Transportation to help military families living in isolated areas
♦ Recreational programs
♦ Day camps for young children
♦ Training and conference management for the Armed Forces
♦ Contract services for military commands
♦ A national publication for young military families.

For more information on your local Armed Services YMCA call your command's MWR or Family Service Center.



➤ Corinne Francis, a YMCA worker, plays and sings for a group of Doughboys in the ruins of Verdun, France, during World War I.

ASYMCA provides recreation, education in Bangor

Story by JO1 Brigmon Lohman, photos by Wendy Hallmark

Naval Submarine Base Bangor, Wash., recently opened a new community center in West Family Housing.

The center, built as part of the base's family housing expansion, opened its doors in May and began normal operations. The center is being operated by the Armed Services YMCA (ASYMCA).

"This is something common at a lot of bases," said Rodney Johnson, family service director for the ASYMCA and former Navy dental technician. "The bases write up a memorandum of agreement, and we come in and run the programs."

The program has been designed with the needs of the base in mind and will offer classes like Gym Kids, Adventures in Storytime, Music and Movements and three types of aerobics for adults.



The center also has ping-pong tables, basketball courts, volleyball nets, tumbling equipment and an outdoor playground.

"Our mission is to cater to the military," said Johnson, a native of Tampa, Fla. "SUBASE came to us and said they wanted a family service program. We showed them what we were already doing and what we could do."

"The center offers many of the same programs as the YMCA in town," said Toni L. McGuire, an instructor with the YMCA in Bremerton. "Having the center here benefits the children, but it gives them a place to interact with other children. But the programs offered aren't just for children. We will be offering classes for all ages."



◄ This is just one of many ball games USS *Carl Vinson's* (CVN 70) Operations Specialist 1st Class (SW/AW) Keith R. Luckett plays with his 7-year-old son Keith.

"We are also going to offer child watching so that parents will be able to take a class or get a workout," Johnson said.

The programs they are offering sound really good," said Suzanne M. Babgert, a family member. "I want to go the aerobics class, and the kids can go to the Gym Kids."

"I think the center is great. It will help alleviate the congestion at the other gym and give the kids a place to play," said Opearations Specialist 1st Class (SS/SW) Keith R. Luckett stationed on USS *Carl Vinson* (CVN 70).

While use of the facility is open and free of charge, the classes are not.

"Fees are the only way we are able to offset our costs," Johnson explained. "We are not being financed by the military at all. SUBASE is providing the building, but funding comes from the Armed Services of the YMCA of the USA."

For more information on the programs offered at the center, call (360) 396-4079. ⚓

Lohman is assigned to the Trident Tides, *Hallmark is a freelance photographer.*

◄ 18-month-old Christopher, son of ET1(SS) Herbert T. Bangert from USS *Georgia* (SSBN 729) gets one of many balls to play with.

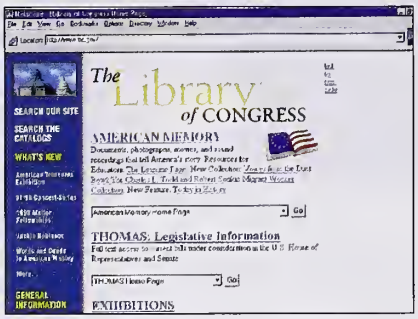


CyberSailor

Hey Sailor, are you doing your homework?

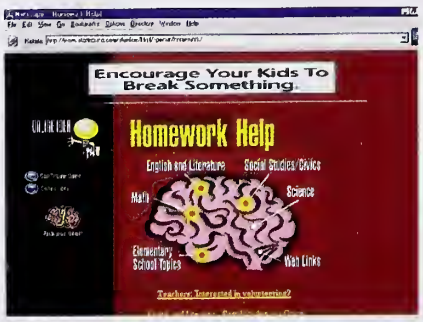
Okay, I've put it off long enough! Like writing this article, I've been procrastinating with the bane of our lives ... homework! No, not the vacuuming and the trash. I'm talking about REAL homework, the kind teachers throughout the millennia have loved to torture us with.

Every time I sit down to do that report on the impact of tree farming on the declining numbers of tree frogs (hey, may not be interesting but it is three credits!), it seems like my browser icon calls out to me. Before I know it, I give in and I'm happily zipping (okay, maybe not "zipping" -- my connection isn't that good) along the virtual avenues of the web.



Is there anything better than mindless meanderings through the electronic maze we call the net? To surf haphazardly from one point to the next in search of that one site which will spark your interest and open new horizons to your creativity? I don't know! But there are times when we can use the web to actually get information on a specific subject.

A quick search for "www. treefrogs. org" came up empty. But when I used one of the many search engines available, I got more hits than I could ever need.



So what's the point? The point is that the "Information Superhighway" is just that — a superstore of I-N-F-O-R-M-A-T-I-O-N. Unfortunately, it's not all useful.

When using the net for homework or research, you have to be careful. Web sites can be created by anyone and given some pretty official sounding titles. Likewise, a site found today may be gone (or rededicated to another topic ... like Peruvian love poetry) the next. As my Editor always tells me ... verify, verify and reverify. Don't rely on just one source.

The first thing you have to master is use of the search engines. Yahoo, Lycos, Excite and the rest have some pretty impressive databases to draw from and they're updated regularly. But each one has ways to get the most out of a search. Read the tips page on how to phrase your query (syntax). That'll help you get to those sites which are most likely to contain the information you're looking for. That way you avoid sites like the guy who believes frogs are actually CIA agents in disguise and a covert way for "big brother" to keep an eye on all of us.

Knowing who you're connected with helps. There are a lot of personal web pages that are legitimate, but you can never be too sure. In my experience, I've found some of the most useful sites to be those maintained by educational organizations. Look for URL's with the .edu extension. Not a total guarantee, but a good starting point. Also, addresses ending in .org can yield some terrific finds. Don't avoid commercial (.com) sites completely. Some are great and, most importantly, free (thanks to advertising). Researchpaper.com (www.researchpaper.com) offers a variety of topic ideas for term paper assignments. Select from one of five subject areas and find a subject to write on, along with some reference suggestions from eLibrary and infoseek.

The Library of Congress is online (www.loc.gov/) and offers documents, photographs and exhibits on American history and government. Most universities now have sites which contain graduate dissertations, research papers and reference works on a number of subjects. Everywhere you look, there's information to be had.

While accessing the net to find some help on that one algebra problem or to develop better study habits doesn't require attribution, research papers do. Traditional school writing/style guides do a good job in guiding you

through formats for bibliographies, footnotes, etc. I've seen some, though, that don't take into account reference material found on the web. If your school has a writing guide, get it. If it doesn't deal with the net, ask. Professors get pretty particular when it comes to proper attribution.

Getting school work done with the help of cyberspace is getting easier and better. One person I know even used e-mail as a way to interview experts on a topic for use in his research. The possibilities are sky-high and, as more libraries and schools come on line, getting higher.
Now, get back to work! Hit those books...or should I say, keyboard?

Know your topic: It's useful to know at least something about your subject. It helps when you're heading to a search engine for find that elusive "perfect site."

Narrow your search: Learn how search engines work. Each one has a link to search techniques which help you configure your request and increase the chance for success.

Check the source: Be wary of all sites! There are some personal sites with great information, but look for those with ".edu" extensions. This means the site resides on an educational server.

Read your school's style guide: Most schools recognize the net's usefulness, but have specific rules on how you use web resources in bibliographies, footnotes, etc.

Helping the Kids



If you're a parent and the kids want to use the net for homework help, here's some things to remember. First, there are some (not many, but some) nuts out there. Sit down with your kids, but be warned, this means you'll have to talk with them, too! And, as a bonus, let them do the keystroking ... it's the best way to keep their interest and they might even learn something. Secondly, there are a number of sites offering completed term papers (with bibliography) on any number of topics. I may be reaching here, but isn't that cheating?

Here's a few sites I found that offer some good help for kids in elementary and high school:

www.fliegler.com/mathman.htm: A site established by a teacher at Trabuco Hills High School in California with help in (you guessed it) math. Her daughter-in-law, also a teacher, offers science help at "www.fliegler.com/science/".

www.startribune.com/stonline/html/special/homework/: Just one of many homework helpers maintained and sponsored by newspapers, radio stations, etc. Links to many useful math, science, history and research sites.

www-lj.ed.com/mw/: A hypertext Webster English dictionary.

If your pride-n-joy are getting older, you might remember that hundreds (if not thousands) of scholarship organizations maintain web sites!

P.S. There are thousands of sites not listed. U.S. Navy does not endorse or support any sites listed nor the links found on any of them.

Eye on the Fleet



Photo by PH2 James Watson

AA David L. Teachey stands watch on the Landing Signal Officer platform to report landing gear and tailhook are down while a Carrier Onboard Delivery aircraft attached to Fleet Tactical Support Squadron (VRC) 30 makes its final approach to the flight deck of USS *Nimitz* (CVN 68).

Eye on the Fleet is a new monthly photo feature that will showcase today's Navy operating around the world "*Forward ...From the Sea.*" We are looking for submissions from fleet Sailors like you who have captured high impact moments of Sailors in action. Submissions must include full credit and cutline information, including: full name, rank, duty station and phone number of the photographer; names of the identifiable people in the photos; details on what's happening and where the photo was taken. Captions must be attached to each photo or slide. Send your submissions to:

ALL HANDS PHOTO EDITOR
NAVSTA ANACOSTIA BLDG 168
2701 S CAPITOL ST SW
WASHINGTON, DC 20373-5819

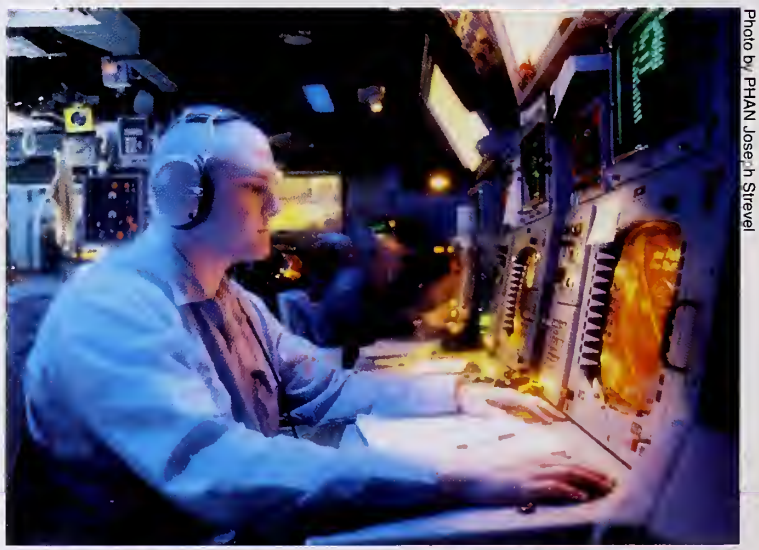


Photo by PHAN Joseph Strevel

OSSN Gary Sadler, from Wellsburg, W.Va., monitors the movement of ships in the Arabian Gulf from the combat center aboard USS *Normandy* (CG 60) Dec. 5, 1997. *Normandy* is currently conducting operations in the Arabian Gulf during a six-month deployment.

▼ AD3 Aretha E. Southwell, of New York City, performs maintenance on a starter control valve prior to installation on an E-2C *Hawkeye* Carrier-based airborne early warning aircraft aboard the aircraft carrier USS *Nimitz* (CVN 68).



PH3 Michael L. Greene



PHAN Johnnie Robbins

▼ SM3 James Hage, of Jefferson, Ore., signals another ship from the aircraft carrier USS *Nimitz* (CVN 68) as *Nimitz*, the aircraft carrier USS *George Washington* (CVN 73) and the amphibious assault ship USS *Peleliu* (LHA 5) battle groups merge into formation. The ships are currently operating in the Arabian Gulf in support of Operation *Southern Watch.*



PHAN Glenne E. Cook III

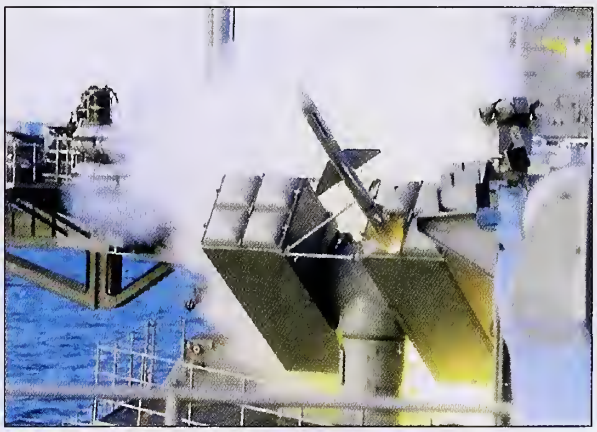


Photo by PH3 Class Prather

▲ The aircraft carrier USS *John C. Stennis* (CVN 74) launches a RIM-7 NATO *Sea Sparrow* System (NSSM) missile during a missile exercise. *Sea Sparrow* is also used for the Basic Point Missile Defense System for anti-ship missile defense.

◄ AOAN Derrick Coach, from Birmingham, Ala., moves AIM-9 *Sidewinder* missiles across the flight deck of the aircraft carrier USS *George Washington* (CVN 73). The "GW" is deployed to the Arabian Gulf in support of Operation *Southern Watch.*

Around the Fleet

Mohawk recovers Navy F-14 jet remains

Sections of the wing and fuselage of a Navy F-14 *Tomcat* fighter jet from Fighter Squadron 101 based in Oceana, Va. , were pulled from the watery depths and placed aboard Military Sealift Command fleet tug USNS *Mohawk* (T-ATS 170) during salvage and recovery operations. The fighter jet crashed into the Atlantic ocean during training maneuvers late last year.



After an exhausting 30-hour search for the missing plane, wreckage of the F-l4 was discovered in approximately 293 feet of water.

Bad weather conditions and rough seas hampered recovery efforts. The Magnum 6000, an underwater, remotely operated vehicle and salvage system used for the first time on board a Navy vessel-was launched to recover sections of the aircraft and equipment.

"Weather was a big concern for all of us," said Capt. Garry Wanzor, *Mohawk*'s master. "We were not far from Cape Hatteras which is not the place to be during winter."

The threat of bad weather conditions forced *Mohawk* and her crew to return to the safety of Little Creek twice before recovery operations were completed.

The pilot and the radar intercept officer ejected from the *Tomcat* just moments before the aircraft crashed into the water about 50 miles off the North Carolina coast while on training maneuvers. The jet's Radar Intercept Officer, CDR Craig A. Roll, was rescued, but the pilot has not yet been found.

Navy honors its finest recruiters

Chief Electrician's Mate (SW) Rene E. Ferreras and LT Michael D. Niedert were named the Navy's top 1997 enlisted and officer recruiters during recent "Recruiter of the Year" (ROY) ceremonies.

RADM Barbara McGann, commander, Navy Recruiting Command (CNRC), Secretary of Defense William S. Cohen, Chief of Naval Operations ADM Jay L. Johnson and Chief of Naval Personnel VADM Daniel T. Oliver in recognized the eight ROYs and their spouses.

Ferreras was a first class petty officer when he arrived for the ceremonies. During an office call with the CNO, Ferreras was promoted to chief petty officer. The Quezon City, Philippines, native is stationed at Navy Recruiting Station (NRS) Mira Mesa in Navy Recruiting District (NRD) San Diego.

"If you put 100 percent effort into everything you do, you'll get back 100 percent in results," Ferreras said. "This honor is definitely the high point of my career. Recruiting duty has taught me how to deal with people very effectively and how to be a better manager."

Niedert is the Officer Programs Officer for NRD Kansas City, Mo. The Waterloo, Iowa, native achieved more than 100 percent of goal in all categories assigned to him during FY97.

The rest of this year's top recruiters were:

— Yeoman 1st Class (SW/AW) Daniel D. Burke, NRD Kansas City, Mo., Support Recruiter of the Year. The Columbia, Mo., native serves as the administrative assistant.

— Personnelman 1st Class Timothy A. Deane, Classifier of the Year. Deane, from Calais, Maine, is the classifier of the Military Entrance Processing Station in Seattle.

— Machinist's Mate 1st Class (SS) Mark A. Engler, Advanced Programs Recruiter of the Year. The York, Pa., native is stationed at NRD Richmond, Va.

— LT Christian A. Paul, NRD Nashville, Medical Recruiter of the Year.

— Ocean Systems Technician (Analyst) 1st

Class Anthony Reihl, Recruiter-in-Charge of the Year. Originally from Bryn Mawr, Pa., he now works at the Joint Maritime Facility in Cornwall, England.

— Master Chief Navy Counselor (SW) Carlis N. Womack from NRD Seattle, is the Chief Recruiter of the Year.

USS Thomas S. Gates rescues two men at sea

ATLANTIC OCEAN — At the end of their six-month deployment, USS *Thomas S. Gates* (CG 51) pulled into Bermuda to embark 39 of their family and friends for a two-day Tiger Cruise back to Norfolk. The guided-missile cruiser received a distress call concerning a small boat adrift 25 miles north of Bermuda and its crew was in need of assistance.

A two-man crew had been sailing the 30-foot French sloop, *Glou Glou*, from Nantucket, Mass., to Bermuda when bad weather came upon them and capsized their boat. David Dietz, the boat's captain, reported that the yacht was hit by 50-foot seas and 60 mph winds that tore off the mast and rolled the boat 360 degrees.

With the mast gone and a broken engine shaft, Dietz, and his crew member Eric Humphrey, rigged a sail that allowed them to travel 250 miles. Unfortunately, just north of Bermuda, the winds shifted and started to push them away from the island. Dietz made an electronic distress signal which was picked up by aircraft from USS *John F. Kennedy* (CV 67). *Thomas S. Gates* was sent to make the rescue.

When *Thomas S. Gates* arrived at the scene, the sloop looked battered. Barely visible from the ships' bridge due to the seas, she deployed her Rigid Hull Inflatable Boat (RHIB) to aid the crew.

The Navy cruiser had to position herself upwind of the two small boats to block the wind so that the RHIB crew could bring the sloop's crew safely aboard.

"It was a good mission," said RHIB coxswain Boatswain's Mate 2nd Class (SW) Michael Marsden. "It really feels good to know that those two men will not have to spend another day adrift."

Following their pick-up, the two rescued sailors were given a medical examination and a hot meal and a ride to Norfolk.

Self-taught artist completes mural

OAK HARBOR, WASH. --

Watch out! The hallway is full of sharks and airplanes. Air Traffic Controller 2nd Class (AW) Christopher Tognocchi has used his natural talents to transform an otherwise dark stairwell in the northwest end of Bldg. 385, NAS Whidbey Island, Wash.

Tognocchi volunteered to head a self-help working team to upgrading the area. With help from the Public Works Self-Help Division and Chief Aviation Boatswain's Mate Peter Ang of Airfield Facilities, Tognocchi began his project. Beginning at the bottom of the staircase and ascending the stairwell, you see an underwater scene of whales, sharks, dolphins and a colorful school of smaller fish.

Farther up you see a shoreline, an eye-level view of Mount Baker and an overhead view of the original air station.

As you climb toward the Air Traffic Control Facility, you move into busy aircraft traffic patterns. When you reach the top of the stairs, there is a painting of the space shuttle *Columbia*.

Other aesthetic improvements included rope tie details on the handrails by AC2 Jason Hathaway and ACAN Julie Wagner. New tiles and stair coverings were laid in by a team of ACs.

Tognocchi took three months to complete the project. The self-taught artist recently received a lateral conversion to the cryptologic technician (CT) rating and moved to Pensacola, Fla. with his wife and son. ⚓



State primaries announced

All states and U.S. territories will hold primary elections for federal and state officials from March 10 to Oct. 3, 1998. Navy personnel are strongly encouraged to participate in these elections and command voting assistance officers should emphasize maximum participation by all hands.

The following states and U.S. territories have scheduled primaries:

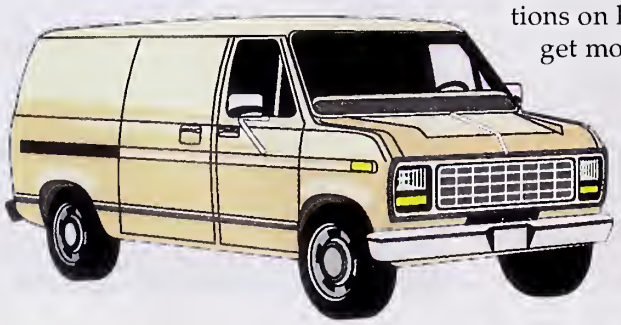
March 10 - Texas
March 17 - Illinois
May 5 - Indiana, North Carolina, Ohio
May 12 - Nebraska, West Virginia
May 19 - Arkansas, Oregon, Pennsylvania
May 26 - Idaho, Kentucky
June 2 - Alabama, California, Iowa, Mississippi, Montana, New Jersey, New Mexico, South Dakota
June 9 - Maine, North Dakota, South Carolina, Virginia
June 23 - Utah
July 21 - Georgia
August 4 - Kansas, Michigan, Missouri
August 6 - Tennessee
August 11 - Colorado
August 18 - Wyoming
August 25 - Alaska, Oklahoma
September 1 - Florida, Nevada
September 5 - Guam
September 8 - Arizona, New Hampshire, Vermont, Virgin Islands, Wisconsin
September 12 - Delaware
September 15 - Connecticut, District of Columbia, Maryland, Massachusetts, Minnesota, New York, Rhode Island, Washington
September 19 - Hawaii
October 3 - Louisiana
November 3 - General Election

The toll-free Voter Hotline, 1-800-368-5056, is available for Navy personnel and their families with voting questions in CONUS (except Virginia), Alaska, Hawaii, and the Virgin Islands. In Virginia and overseas, call DSN 224-3248 or (703) 614-3248, Mon. to Fri., 7:30 a.m. to 4:30 p.m. (EST). Mark your calendar and don't forget to vote. *(BUPERS)*

Toll-free number established to check DITY claims

The Naval Transportation Support Center in Norfolk has established a toll-free hotline for Sailors to check on the status of their Do-It-Yourself (DITY) move claims. The number is 1-888-742-4467.

Service members can call the toll-free number to find out when their DITY claim is received; when a claim is processed; the amount of a refund check, if one is warranted; and when the check will be mailed. The automated response also tells callers if their claim is being held up for any reason, and gives instructions on how to contact someone to get more information.



The automated toll-free number is available 24 hours-a-day. Customer service is available Monday through Friday between 1 p.m. and 4 p.m. (EST).

Overpaid? Don't spend the extra yet!

Sailors are not responsible for calculating their pay, but they are responsible for questioning anything which isn't normal, or risk being charged with larceny, according to a recent ruling handed down by the U.S. Court of Appeals for Armed Forces.

Computerized systems, equal pay periods, and Leave and Earnings Statements (LES) have made budgeting your pay easy. You should be getting the same amount every payday.

But computers are only as smart as their operators and the electricity they run on. When you notice a radical difference in your pay from last payday and you aren't due for a longevity raise, promotion or the annual pay raise, any great difference in pay may be an error. You may be the recipient of more pay than you deserve.

Sailors who haven't reported the difference to their Disbursing Offices have found themselves held liable for stealing. Even if you do notice and report a questionable payday - and nothing changes - you are still liable for the overpayment. Regular disbursing audits balance payments made with those due. You will eventually have to reimburse that amount, so bank the overage.

Look at it this way - would you rush in to your disbursing office and insist on knowing why you were paid too little? Rush in if you're being paid too much, too. It could be the smartest move you make. *(NAVNEWS)*

New tuition assistance policy announced for FY98

Navy officials recently announced the Tuition Assistance (TA) Policy for FY98 that provides $2,500 for undergraduate courses and $3,500 for graduate courses. The new policy applies to both officer and enlisted personnel.

This is the final year that tuition assistance (TA) policies will be set by the individual military services. Beginning next fiscal year, TA policy will be set by the Department of Defense and will be uniform for all branches. Starting Oct. 1, 1998, the policy will be $3,500 per member, with a $187.50 per credit hour cap, regardless of the level of study.

No course caps or other restrictions apply. Requests for waivers to exceed the limits will not be granted.

In announcing the FY98 policy, the Chief of Naval Personnel reiterated the Navy's view that education is one of the top quality of life priorities and encouraged Sailors to participate in a voluntary education program. He pointed out that the Program for Afloat College Education (PACE) is now open to all ships on a continuous basis. He also said that the 12 Academic Skills Learning Centers scheduled to open in FY98 will bring the Navy's world-wide total to 21. An ASLC provides a Sailor a place to prepare for college or study to raise their ASVAB scores.

Additional information regarding TA policy is available in NAVADMIN 245/97 or by calling Dr. Fran Kelly at BUPERS, 703-693-1749, DSN 223-1749 or LCDR Kate Lowell at 703-693-1738, DSN 223-1738. *(BUPERS)*

Early separation policy returns to MILPERSMAN format

Early separation requests are again being processed through the MILPERSMAN procedure, announced in NAVADMIN 265/97 by the Bureau of Naval Personnel.

Earlier this year, NAVADMIN 007/97 gave commanding officers expanded authority for granting early separation requests, as long as the units were willing to accept a gapped billet. With the Navy approaching steady state, the service is focusing even more on retaining highly qualified and skilled Sailors and improving retention in all areas.

In FY97, approximately 800 Sailors were released under the early separation program, and this program expired at the end of the fiscal year. Commanding officers still have authority to separate enlisted personnel for specific situations, outlined in MILPERSMAN 3620100, where members have 90 days or less obligated service to complete before their end of active obligated service (EAOS).

Requests that require BUPERS approval will be considered on a case-by-case basis with emphasis on unit and Navywide manning levels of the member's assigned rate and Navy enlisted classification (NEC) code. *(BUPERS)*

Navy programs gear up as tax season nears

The Navywide volunteer income tax assistance (VITA) and electronic tax filing programs (ELF) are already gearing up for the 1998 tax season.

Last year, Navy volunteers prepared almost 150,000 state and federal returns, providing services valued at close to $11.5 million. The Navy is looking to expand the VITA/ELF programs even more this coming tax season.

Legal offices, family service centers, staff judge advocate offices and command financial specialists have already asked for 122 of the Navy's 140 electronic filing licenses to bring free electronic tax filing services to their shipmates in 1998. Last year, Navy tax programs operated on every continent at 119 sites, including 34 ships, and doubled the amount of tax assistance provided in 1996. The ELF program manager for CNO, the Office of the Judge Advocate General's (OJAG) legal assistance division, anticipates the amount of tax assistance provided in 1998 will continue to increase.

Commands who do not currently have access to a military electronic tax filing program and are interested in operating one should contact OJAG (Code 36) for information and assistance at DSN 221-7928 or (703) 325-7928. *(OJAG)*

Rights and Benefits Update

The instruction number for the Adoption Expense Reimbursement Program is SECNAVINST 1745.3A. *(BUPERS)*

Shipmates



Quartermaster 3rd Class (Surface Warfare) Wanda F. Wright was selected Fleet Area Control and Surveillance Facility, Virginia Capes, at NAS Oceana, Va., Junior Sailor of the Quarter, 3rd Quarter, 1997. The Waycross, Ga., native is assigned to the Schedules/ Safety Division as the Assistant Safety Officer. She has qualified as a Military Training Routes Specialist, a job usually assigned to Air Traffic Controllers.



Hospital Corpsman 2nd Class (Surface Warfare) James B. Area was selected as the Navy Environmental and Preventive Medicine Unit No. 2 Sailor of the Quarter, 1st Quarter, 1997. He is a preventive medicine tech assigned to the Industrial Hygiene Department. During the quarter, he assisted in three industrial hygiene surveys, conducted two noise surveys and taught industrial hygiene courses to 30 people.



Dental Technician 2nd Class (Surface Warfare) Tony A. Lauderdale was selected as USS *Frank Cable* (AS 40) Junior Sailor of the Quarter, 2nd Quarter, 1997. The Atlanta native is the dental department's supply petty officer, and is responsible for ordering all supplies for the department, as well as tracking the department's budget and managing the supply back log.



Aviation Machinist's Mate 2nd Class John F. Beck was selected as Sailor of the Quarter, 2nd Quarter, 1997, for Naval Air Reserve Point Mugu, Calif. The Sterling Heights, Mich., native was responsible for the research, update and submission of the annual review for two HH-60H helicopter maintenance courses. During the quarter, he also provided 92 hours of classroom instruction to Selected Reserve personnel.



Electrician's Mate 2nd Class (Surface Warfare) Christopher G. Shaw was selected as Junior Shore Sailor of the Quarter, 2nd Quarter, 1997, for Fleet Information Warfare Center Det., San Diego. The Greenwood, Miss., native is the Command Facility Maintenance Electrician and Command Hazardous Material Coordinator. He saved the command more than $3,500 by upgrading and installing facility lighting and power receptacles.



Your shipmate's face could be here! Does your command have a Sailor, civilian employee or family member whose accomplishments deserve recognition? Send a short write-up and full-face color print or slide to: *All Hands* magazine, Naval Media Center, Pubs Division, NAVSTA Anacostia, Bldg. 168, 2701 S. Capitol St., S.W. Washington, D.C. 20373-5819.

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Any Day in the Navy 1998

Any day of the week May 4-10 is a typical day in the Navy. That's why it's so important to us.

Wanted are quality photographs that capture Sailors, Marines, Navy civilians, Naval Reservists and family members performing daily tasks, interacting with each other and/or otherwise contributing to mission accomplishment. The shoot has been extended to encompass an entire week to allow commands more flexibility. Selected photos will be published in the October 1998 issue of *All Hands*.

Photographs taken should reflect the diversity of both people and capabilities in the U.S. Navy and must be shot during the week of Monday, May 4 through Sunday, May 10, 1998. Photos depicting safety or uniform violations will not be considered. The best shots tend to be candid and unrehearsed, displaying the imagination and creativity of the photographer.

Submissions must include full credit and cutline information, including: full name, rank, duty station and phone number of the photographer; the names and hometowns of identifiable people in the photos; details on what's happening and where the photos were taken. Captions must be attached individually to each photo or each slide.

Photos must be processed and received (not postmarked) by *All Hands* by May 30, 1998. Photos will not be returned. Submit processed and mounted color slides, or quality color prints, either 5X7 or 8X10. Digital images will also be accepted. Just mail a zip disk containing the high resolution JPEG images with cutlines and photo credits embedded. Zip disks will not be returned. You may also download high resolution JPEG images directly to the News Photo Division of CHINFO by dialing (703) 521-1370 or (703) 521-1713. Mark all images as "Any Day Submissions."

Mail submissions to: Naval Media Center, Publishing Division, ATTN: *All Hands*, Photo Editor, NAVSTA Anacostia, Bldg. 168, 2701 S. Capitol St., S.W., Washington, D.C. 20373-5819.

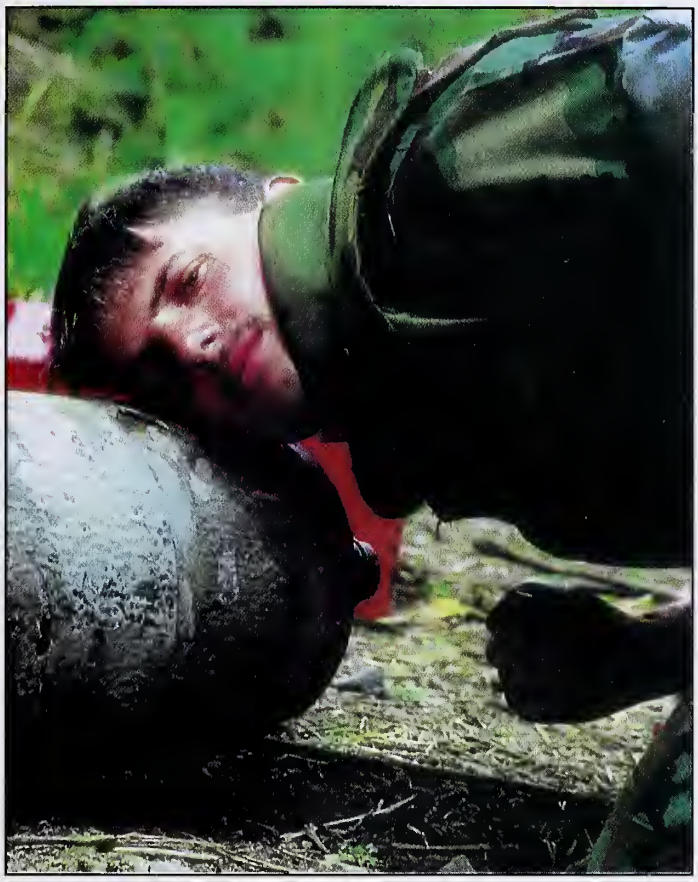


Photo by PH1(AW) David Tucker

Photocopy this form and attach a completed copy to each photo you submit.

Photographer:

Full name: _____

Rank: _____

Duty station (including mailing address and phone number): _____

_____

_____

Photograph:

Where photograph was shot: _____

Caption (what the photo depicts): _____

_____

_____

People in the photo (include first and last names, ranks/ratings, warfare designators and hometowns):

_____

_____

NAME: MT2(SS) Jon Bellinfante

COMMAND: Strategic Weapons Facility, Atlantic, Kings Bay, Ga.

HOMETOWN: Anaheim, Calif

HOBBIES: Computer games, sports and fishing

FAVORITE DUTY STATION: USS *Rhode Island* (SSBN 740) (Gold)

FAVORITE QUOTE: "When you cease to make a contribution, you begin to die."

KEYS TO SUCCESS: Volunteering with the Personal Excellence Partnership (PEP), the St. Mary's Police Department and the Carl Vinson VA Hospital.

GOALS: To become a naval officer and get a bachelor's degree in criminal justice.





ALL HANDS

MAGAZINE OF THE U.S. NAVY

MARCH 1998



Sixth Fleet

Forward ... From the Med

Plus

Warfare pin rules change

It's not your grandmother's Navy

Smart tax tips

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Take a close look at Sixth Fleet in action: Its mission, who they are and why its presence in the Mediterranean is so important to the United States and its allies.

4 *Mission map*

Sixth Fleet participates in more than 90 operations and exercises each year. Find out where they happened and what other countries joined in the action.



8 *Ports of Call*

Photo essay of some of the best ports of call in the region.

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22 *Mother of the Sixth Fleet*

Nearly every Sailor and Marine who has served in the Mediterranean since 1980 knows her.

Photo by PH2 Jim Vidrine

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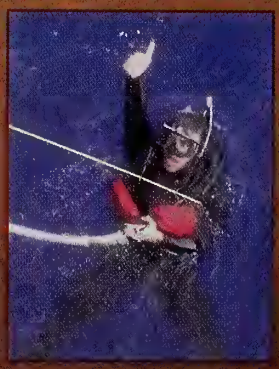
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On the Cover



Search and Rescue swimmer Petty Officer 2nd Class Juan Cano of Humacao, Puerto Rico, gives the A-OK sign signaling he is ready to be hoisted back aboard USS *John Rogers* (DD 983) following a successful recovery during exercise *Reliant Mermaid. Photo by PH2 Brett Siegel.*

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Sixth Fleet

Forward ... From the Med

Story by JO1 Thomas E. Jones Jr. and PH2 Brett Siegel



The United States' naval experience in the Mediterranean began as early as 1801. Commodore Richard Dale was placed in command of four ships with orders to patrol the Mediterranean and prevent the navies and pirates of the Barbary Coast from interfering with and seizing American merchant shipping. Dale and subsequent commanders of American fleets in the Mediterranean quickly found out what it took to assemble a fleet and fight so far from American shores.

Today's 6th Fleet carries on American naval presence in the Mediterranean — to maintain peace and stability in this vital area of the world. The U.S. presence in the Mediterranean Sea is now a fundamental element of U.S. and NATO defense strategies.

The Cold War occupied much of the fleet's attention until the breakup of the Soviet Union in 1991. The Sailors and Marines of the 6th Fleet, along with other U.S. air and land forces, worked with America's NATO allies to counter a substantial Soviet threat to the stability of the Mediterranean region.

The end of the Cold War didn't bring an end to the 6th Fleet's mission. The threat from the Soviet Union was replaced by threats from



Photo by PH2 Brett Siegel

➤ An SH-3 is directed to land by ABH3 Nicole Todd, the landing signals enlisted on the flight deck of USS *LaSalle* (AGF 3).



Photo by PH2 Brett Siegel

➤ Sailors and Marines stationed on board USS *Nashville* (LPD 13) come to the aid of 51 Americans fleeing Albania during Operation *Silver Wake*.



U.S. Navy photo

▲ A Navy F-14 *Tomcat* fighter launches to take part in one of 6th Fleet's 100-plus exercises and operations.



Photo by QM Richie Frost.



Photo by PH2 Brett Siegel

▲ Members of USS *Mitscher's* (DDG 57) Command-in-Control Center watch team monitor air and surface traffic in the vicinity of a NATO live-fire missile exercise.

➤ An SM-2 BLK III Surface to Air Missile, fired from USS *Mitscher* (DDG 57), exits its launcher tube on its way to meet an incoming German *Kormoran* antiship missile during a live fire exercise held near the coast of Crete. The exercise was comprised of naval surface ships and aircraft from Germany, Italy and the United States.

civil and ethnic wars in the Balkans, Middle East and on the African continent. According to 6th Fleet officials, 80 percent of the contingencies the United States responded to since the breakup of the Soviet Union have taken place in the 6th Fleet's area of responsibility.

Many of the news headlines during the past few years have included 6th Fleet elements. For instance, in June 1995, U.S. Marines embarked on board USS *Kearsarge* (LHD 3) conducted a daring rescue of Air Force pilot Lt. Scott O'Grady from deep inside the hostile confines of Bosnia-Herzegovina. Three months later, NATO called upon U.S. naval seapower to conduct sustained air raids and to use *Tomahawk* cruise missiles, to bring the warring parties in the Balkans to the peace table.

The 6th Fleet continues to provide assistance to NATO through enforcement of a no-fly zone over Bosnia-Herzegovina and the enforcement of U.N. sanctions against Serbia

Photo by PH1 Jim Hamp Rile

The Med



PH3 Brian Aliff

▲ Two Sailors from USS *Cyclone* (PC 1) conduct training in the Mediterranean on board a RHIB assault craft.



Photo by James Williams

▲ USS *Ramage* (DDG 61) an *Arleigh Burke* destroyer, provide forward presence from the Mediterranean during a recent deployment.



and Montenegro.

During a three-year span, from June 1995 to present, 6th Fleet units were involved in the noncombatant evacuations of civilians from life-endangering situations in Liberia, Sierra Leone, Albania and the Congo (formerly Zaire).

While "forward presence" demands a force capable of deterring would-be aggressors, other more subtle factors are at work in 6th Fleet.

The 6th Fleet conducts Navy-to-navy meetings between the United States and other Mediterranean maritime forces to increase understanding and gain an appreciation of each other's capabilities and interests. Furthermore, the 6th Fleet carries out more than 80 joint and combined exercises each year, plans more than 1,000 port visits a year and provides officer exchanges with Mediterranean and Black Sea area nations.

The 6th Fleet's area of responsibility encompasses some of the most significant threats to world stability. Fortunately, the fleet is on call and on hand as a "Power for Peace."

Photo by PH1 Jim Hampshire

Sixth Fleet Team

The U.S. 6th Fleet is operationally organized into task forces. Each task force is responsible to the 6th Fleet Commander for specific functions related to assigned units.

Task Force 60/Battle Force 6th Fleet — Composed of one or more aircraft carriers, each with a complement of approximately six cruisers and destroyers. On board the aircraft carrier is an air wing of 65 to 85 aircraft.

Task Force 61/Mediterranean Amphibious Ready Group (MARG) — Composed of approximately three amphibious ships and their embarked landing craft.

Task Force 62 — Composed of a Marine Expeditionary Unit (MEU) of approximately 1,800 Marines.

Task Force 63/Logistics Force 6th Fleet — Composed of oilers, provision ships, and repair ships. Its mission is to deliver supplies



Illustration by JO1 Siegfried Brunner



Photo by J. James Williams

▲ Two Navy F-14 *Tomcats* conduct training while on deployment to the Mediterranean.



Photo by PH2 Joseph Gunder

▲ A shell ejects from a 9mm pistol fired by ENS Dan Ruhl of Madison, Miss., during small arms qualification on USS *LaSalle's* flight deck.

at sea and make repairs to other ships and equipment of the fleet.

Task Force 66/69 — Responsible for planning and coordinating area submarine and antisubmarine warfare operations in the Mediterranean.

Task Force 67 — Composed of land-based maritime patrol aircraft. These aircraft operate over the waters of the Mediterranean in antisubmarine, reconnaissance, surveillance and mining roles.

Wearing different hats

Commander, U.S. 6th Fleet is responsible for commanding Navy ships in the Mediterranean, Adriatic and Black Seas. But the vice admiral-in-charge-of-the fleet also wears another important hat — Commander, Naval Striking and Support Forces Southern Europe (STRIKEFORSOUTH).

This NATO position places the 6th Fleet commander in charge of a staff of 50 allied personnel, as well as NATO Task Force 502 (carrier forces), Task Force 503 (amphibious forces), and Task Force 504 (landing forces).

Naval Striking and Support Forces Southern Europe is a subordinate command of Allied Forces Southern Europe (AFSOUTH), headquartered in Naples, Italy. ⚓

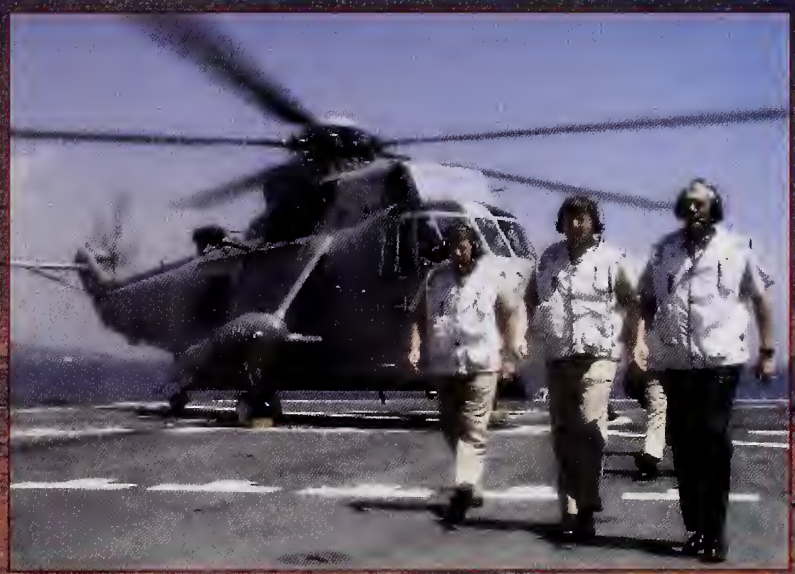


Photo by PH2 Brett Siegel

▲ VADM Steve Abbot (COMSTRIKFORSOUTH), ADM Lopez (CNE, AFSOUTH) and Army Gen. Wesley Clark (EUCOM/SACEUR) arrive on a Navy ship for a NATO operations briefing

Sixth Fleet at a glance



#	OPERATION
1.	SILVER WAKE (Noncombatant Evacuation Operation (NEO) Albania)
2.	GUARDIAN ASSISTANCE* (contributed assets NEO Zaire)
3.	GUARDIAN RETRIEVAL* (contributed assets NEO Sierra Leone)
	* Not shown
4.	BALTOPS 97

#	EXERCISE	97 DATES
1.	DISTANT THUNDER	04/29 - 05/09
2.	LINKED SEAS	05/05 - 05/19
3.	ALCUDRA	05/26 - 06/14
4.	NADOR	05/27 - 05/31
5.	BETACOM	05/28 - 06/06
6.	US-FRENCH DACT	06/01 - 06/15
7.	AVIS	06/07 - 06/16
8.	ALEXANDER THE GREAT	06/12 - 06/20
9.	COOPERATIVE PARTNER	06/22 - 07/05
10.	CSAR	06/26 - 06/26

Operation Exercise NATO Exercise



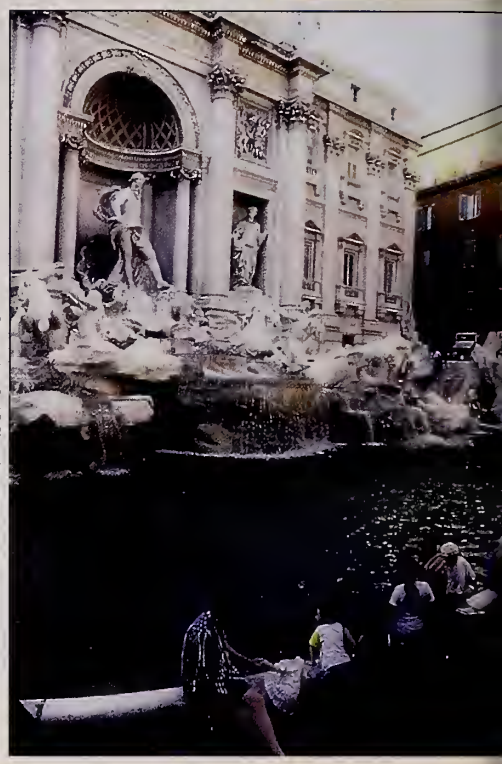
#	EXERCISE	97 DATES
11.	ARIADNE 97	06/30 - 07/11
12.	C6F INVITEX	07/10 - 07/18
13.	US-FRENCH EODEX	07/15 - 07/18
14.	TUNISIA EODEX	07/15 - 07/26
15.	ATLAS HINGE	07/21 - 07/27
16.	NADOR	07/21 - 07/27
17.	RELIANT MERMAID	08/10 - 08/14
18.	RESCUE EAGLE	08/13 - 08/20
19.	SEA BREEZE 97	08/23 - 08/31
20.	SPANISH MINEX	09/02 - 09/11

#	EXERCISE	97 DATES
21.	TAPON 97	09/12 - 09/21
22.	DAMSEL FAIR 97	09/12 - 10/05
23.	MOROCCAN BILAT	09/22 - 09/24
24.	SALVAGE / DIVEX	09/18 - 09/25
25.	SPANISH DIVEX	09/23 - 09/30
26.	DYNAMIC MIX 97	09/23 - 10/07
27.	BRIGHT STAR	10/21 - 11/01
28.	MARE NUOVA	11/10 - 11/20
29.	MINOR MANAR	12/01 - 12/12

The above map shows a sample of the more than 80 operations and exercises conducted by Sixth Fleet each year.

Off duty in the Mediterranean





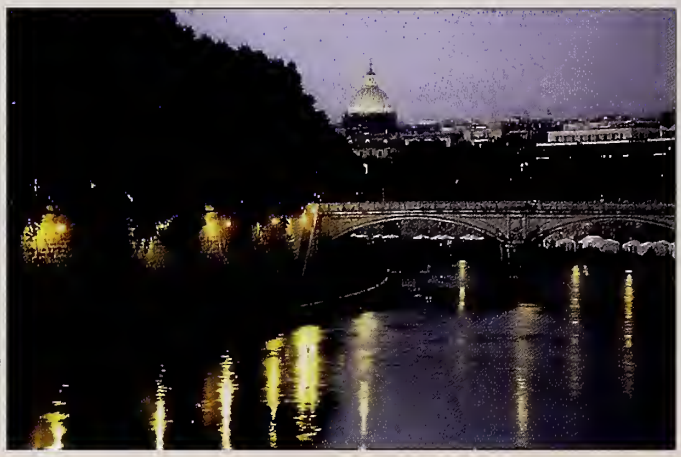


Photo by PHC Tom Howser

Clockwise from right: Twilight settles on the Tiber River in Rome; the city's Trevi Fountain was made famous in the 1950's movie "Three Coins in a Fountain;" a Sailor and his wife visit Rome's Coliseum, where gladiators once fought to the death.





Photo by PH2 Joseph Gunder

Best Ports of Call

Ranked by Sailors, here's a list of some of the Mediterranean's most entertaining spots to visit. Venice and Genoa, Italy: Augusta Bay, Sicily; Ankara, Antalya and Istanbul, Turkey; Rhodes, Corfu, Crete and Athens, Greece; Alexandria, Egypt; Tunis, Tunisia; Haifa, Israel; Cannes and Toulon, France; Valletta, Malta; Palma de Majorca, Barcelona, Benidorm and Torremolinos, Spain; Lisbon, Portugal; and Casablanca, Morocco.



Photo by PHC Tom Howser



Photo by PH2 Joseph Gunder

Clockwise from top: The sun sets over a Venice beach; a boy finds a flock of new friends in Old Rhodes, Greece; a man and his camel make their way past one of Egypt's pyramids; a gondola pilot navigates one of Venice's famous canals.



Photo by PH2 Brett Siegel



Destination...

Naples

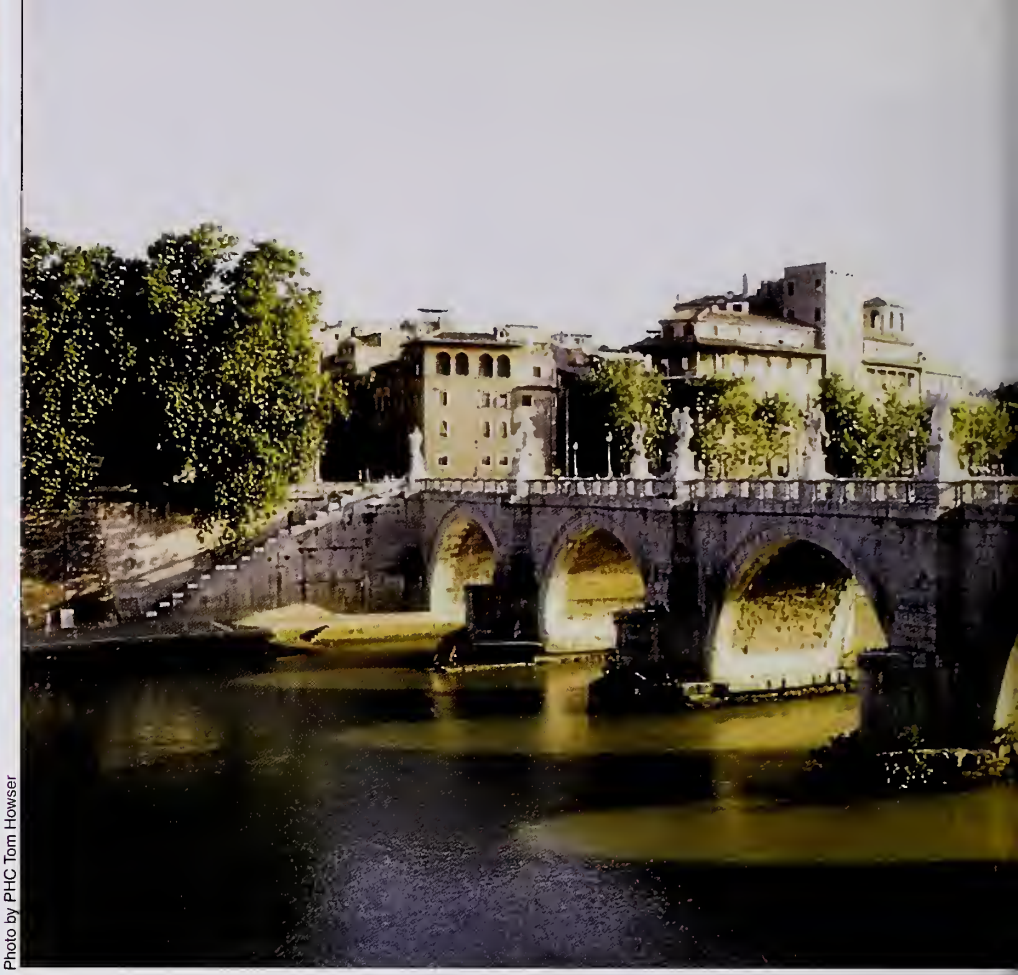


Photo by PHC Tom Howser

Watch the sun set slowly behind the Coliseum in Rome or gaze at a 400-year-old painting at the Uffizi Gallery in Florence. No, it's not a movie, but a normal weekend for the Sailors and families stationed at the Naval Support Activity (NSA) Naples, Italy.

The opportunity to travel for Sailors stationed at NSA is only a train ride away. Trains in Naples run to Rome every hour. Fares are very reasonable with a one way ticket as low as 10 dollars. From Naples you will be able to travel to other cities in Italy and Europe with ease.

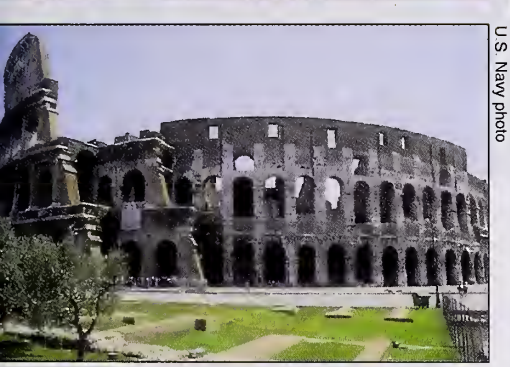
Naples is a seaport city that lies just above the "heel" on the west coast of the Italian peninsula.

To make your tour of duty enjoyable, be sure to pack your positive attitude and be prepared to adjust to a new life. You will immediately be struck by the beauty of Naples. And if you experience some difficulty in overcoming some of the cultural differences, the people of Naples will help you in any way possible. Italy has a reputation for being a friendly country, and the people of Naples are no exception.

Neapolitans are enthusiastic hosts and most will go out of their way to make you feel welcome.

The key to having a good tour of duty is to learn the language. Neapolitans are delighted when you make an attempt to learn even the most basic phrases. It's recommended that you buy a small Italian dictionary before





U.S. Navy photo

▲ Naples is only a quick train ride away from away from Roman-era landmarks, like the Coliseum and The Sant'Angelo Bridge, in Rome.

arriving and learn some basic words and phrases. Once you arrive in Naples, there are Italian language courses offered on base to military and DoD personnel.

Naples is currently undergoing the largest ever European quality-of-life improvement project called the Naples Improvement Initiative. New government quarters



U.S. Navy photo



◄ Roadside vendors are common around Naples. Fresh fruit, vegetables and seafood are sold from trucks, carts and stands.

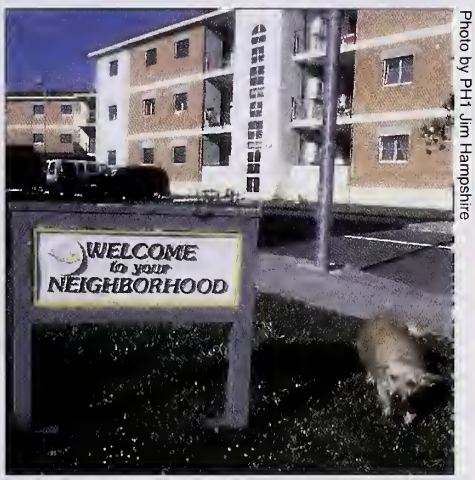


Photo by PH1 Jim Hampshire

▲ Thanks to the Naples Improvement Initiative, a sign and a happy dog welcome Sailors stationed at NSA Naples to their new homes.

are being built, as well as a new elementary and high school, commissary and exchange.

The most important thing to remember about living in a foreign country is that it isn't the United States. Every day items Americans take for granted — from houses to basic utilities to transportation — work differently in Naples. A willingness to learn and adapt is vital to a successful tour. ⚓

Information compiled by JO2 Jeremy Allen, a staff journalist assigned to All Hands, *JO3 Christopher Sherwood, USNR, JOCS Bob Hansen USNR and Chris Ingalls, Naples public affairs office.*

At a glance

Major Commands:

Commander Fleet Air Mediterranean, Commander Maritime Surveillance Reconnaissance Forces, Commander Maritime Air Force Mediterranean, U.S. Naval Hospital, Commander Submarine Group 8, U.S. Naval Dental Center, U.S. Naval Legal Service Office, Naval Security Group Activity and Personnel Support Detachment

Facilities Available:

Internet/email: www.naples.navy.mil/nsa@naples.navy.mil
Population: 10,000
Housing: Government and community housing
Temporary housing: Yes
Commissary: Large
Exchange: Large
Public schools: 1 elemementary, 1 high school,
Private schools: 1 elementary, 1 middle, 1 high school
American colleges: 5 fully accredited (see Gaeta)
Family service center: Full Service
Child care: Full Service
Health care: U.S. Naval Hospital, Naples
Insurance: Auto insurance is extremely high. Enlisted personnel should set aside $1,500 to cover one year.
Recreation facilities: Golf course, swimming pools, bowling alley, softball fields, a football field, soccer, tennis, batting cages, picnic sites, hobby shops.
Other Facilities:
Navy Federal Credit Union., Barber/Beauty Shop, Chapel, Enlisted Club, Shopette, Travel Office

Allowances:

MIHA: Move In Housing Allowance is a one-time, $900 to $1,000 allowance to help defray the cost of moving on the economy.
OHA: Overseas Housing allowance
COLA: Cost of living allowance fluctuates with the Lire.
Gas coupons: Allows tax-free fuel to be purchased by military personnel stationed in Italy.

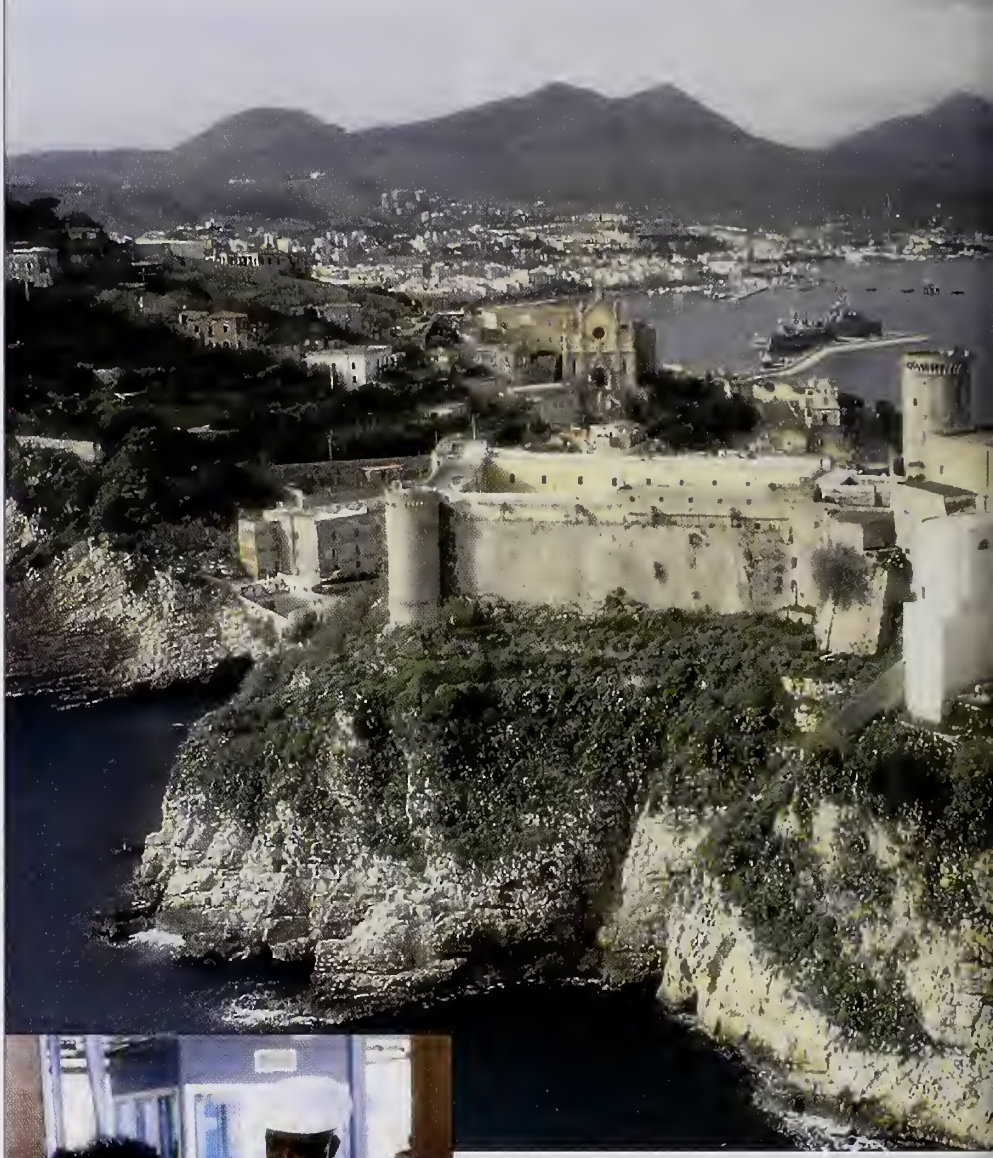
Cultural attractions:

The Archaeological Museum, The Capodimonte Museum, The Royal Palace Museum, The National Library .and The Bellini Theater



Destination...

Gaeta



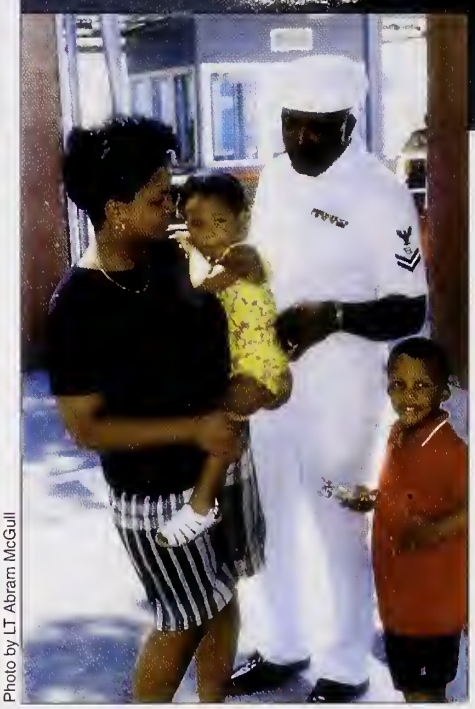


Photo by LT Abram McGull

▲ OS2 Van Arnold of Chicago, takes a moment out of his guard duties at the Italian dock in Gaeta, Italy, where his ship, USS *La Salle* (AGF 3) is homeported to say hello to his wife Lisa and his two children, Isaiah and Ivanna. His family had just arrived in Italy.

It's a city full of history, culture and excitement — a small peninsula within a peninsula, surrounded by the Tyrhennian Sea. Its warm beaches and picturesque mountains were a summer haven to many Roman emperors. Welcome to Gaeta, Italy.

Situated between Rome and Naples, Gaeta is home to the U.S. 6th Fleet's flagship USS *La Salle* (AGF 3).

Gaeta is a tranquil town during the mild winter and a tourist hot spot in the steamy summer. Because of its position on the water the winds give a slight



Photo by PH2 Brett Siegel

▲ Aerial view of Old Gaeta, Italy, with USS *LaSalle* in the background

relief on summer nights.

Originally, Naval Support Activity (NSA) Gaeta was a detachment of NSA Naples. But in January 1994 NSA officially separated and is now located on Monte Orlando overlooking the Gulf of Gaeta. Now NSA Gaeta's primary mission is to support 6th Fleet staff operations.

Most Americans stationed in Gaeta, live in apartments or houses in town because military housing is very limited.

Gaeta is a European seaside resort, and prices tend to be steep.

At a glance



Major Commands:

Commander 6th Fleet; USS *La Salle* (AGF 3); NATO Communications School

Facilities Available:

Internet: www.naples.navy.mil/c6f/home.htm
Navy Family Services Center: Full Service
Bowling lanes: Yes
American Colleges: Central Texas College, City College of Chicago, Univ. of Maryland University, Bowie State University and University of Oklahoma in Naples
Schools: Day Care, DODDS Gaeta American School: K-8 (special ed. classes available) DODDs High School - Boarding at Rome, London or Naples
Spouse Employment: Spouse employment Assistance Program, Gaeta; Resource Office, Naples.
Commissary: NEX Mart, full commissary and exchange
Credit Union: NFCU
Library: Yes
Military Clinic: Branch Medical Clinic
Military Hospitals: Naval Hospital Naples
Dental Clinic: limited service in Gaeta, full service at Naples (no orthodontics)
MWR Office: full service
Housing: community 10-12 month waiting list for two and three bedrooms.
Pets: no quarantine but dogs and cats must have rabies vaccina tions current. No veterinarian services on base.

Cultural Attractions

Annunziata Church/Golden Chapel - (14th century)
The dogma of the Immaculate Conception was contemplated in the Golden Chapel by Pope Pius IX in 1848.
Tomb of Munazio Planco - (1st century A.D.)
One of Augustus Caesar's generals is buried in this mausoleum, considered to be the best preserved in all of Italy.
Church of St. Francis - (19th century)
The youngest church in Gaeta (only 150 years old)
Split Mountain - According to its legend this mountain split upon the death of Jesus Christ.
Centro Storico Culturale - The museum was the home of Cardi - nal de Vio. It contains frescoes and many artifacts.

It's recommended that you bring a major credit card for traveling, because its safe and widely accepted wherever you travel.

Whether stationed onboard *La Salle*, with 6th Fleet staff or just passing through, Gaeta is a very friendly place to enjoy the sights or raise a family. ⚓

Information compiled by JO2 Jeremy Allen, a staff writer assigned to All Hands *and JOSN Charles A. Gasque, USNR.*



Photo by LT Abram McGull

▲ Fresh fruit stands are as much a part of the historic landscape as the cobble- stone streets. The fruit merchant (center) selects the best plums under the watchful eyes of his patrons.



Destination... Souda Bay



Photo by PH2 Patricia Findley

If you're looking for an island full of fun, warmth, hospitality and vitality, then look no further than enticing Souda Bay, Crete, Greece.

Crete is the largest of Greece's southern island and the fourth largest island in the Mediterranean. It is located just above Africa and below Turkey. Crete is divided into four prefectures, each with its own capital - Chania (Hania), Rethymnon (Rethimno), Iraklio (Herakleon) and Agios Nikolaos.

Crete has it all, from snow-capped Mount Ida and the gorges of West Crete to picturesque villages and lovely coastal resorts. There is also a wealth of beaches around the entire island, particularly at Malia and along the northwest coast.

On this exotic and exciting island sits a little-known secret called Naval Support Activity (NSA), Souda Bay, Crete. It's located on the Hellenic (Greek) air force base near the village of Mouzouras, 10 miles east of the city of Hania.

NSA Souda Bay was first created as a detachment of NAS, Sicily in May 1969. It then became a full Naval Support Activity in 1980. It now occupies 110 acres on the north side of the air base. The airfield also serves as the civilian airport for the Hania region of Crete.

NSA Souda Bay's mission is to provide, operate, and maintain facilities and services to support and enhance the readiness of U.S. and allied forces operating in or transiting through the 6th Fleet area. This includes ships, aircraft, detachments



and personnel.

Today, the NSA is comprised of 13 officers, approximately 227 enlisted personnel, 165 U.S and local national civilians; and 18 tenant commands.

The approval of the new Mutual Defense Cooperation Agreement with the Hellenic Republic is an aggressive five year construction program with some 509 projects. The cost is more than $37 million dollars and it's going to make Souda Bay one of the Navy's major "growth industries" despite drawdowns in other areas.

Whether you enjoy going to the beautiful mountains to get away from it all, kicking back on the sandy beaches or learning the language from the friendly Grecians, Souda Bay is the place to be. ⚓



Photo by PH2 Patricia Findley



◄ Agia Triada Monastery is only a 5 minute drive from NSA and overlooks a grove of olive trees.

◄ Horse Drawn carriage tours are available in the ancient city of Hania, Souda Bay.

Information compiled by JO2 Jeremy Allen, a staff writer for All Hands. *PH2 Patricia Findley, USNR, is a photojournalist assigned to NROI Det. 220.*

At a glance

Major Commands:

USNAVDET, Souda Bay: Mobile Mine Assembly Group DET SIX; Naval Communication Station, Greece Detachment; Naval Inshore Warfare Task Unit, Europe; and Naval Weather Service Environmental Detachment.

Facilities Available:

Medical/Dental: Very limited.
NEX/Commisary: Very limited.
ON/OFF Base Housing: Limited BEQ/off-base E-5 and above.
Automoblies. Authorized for 12-month or longer tour.
Pets: No quarantine needed. Members pay transportation and pets must have validated shots. Closest military veterinarian is NAS Sigonella.
Credit Unions/Banks: None.
Uniforms: Not readily available.
Morale Calls: Authorized for permanent party only.
Recreation: Current facilities on base are for softball, soccer, basketball, tennis, swimming, ping-pong, volleyball, sailing, mountain bikes, racquetball, weight lifting and bowling.
Educational Opportunities: Limited. GED, CLEP tests and DANTES tests are available periodically from NAS Sigonella. University of Maryland offers an Associates of Arts (AA) degree.
Environmental and Morale Leave: Personnel on a one year unaccompanied tour at Souda are eligible for two EML trips per year to Germany, Italy, Spain, Turkey, United Kingdom or CONUS.
Extension Benefits: Three options: $85.00 per month for 12 months, an additional 30 days leave, or a ticket from Hania to port of entry in CONUS and return, plus 15 days leave.
Spouse Employment: Very limited.
School:No DODDS schools, only home schooling. Closest high school is Athens or London.
Child Care: No facilities on base.



Destination... La Maddalena



Photos by Basim Shamiyeh

Often referred to as the land of the beautiful beaches, sunrises and campsites, La Maddalena, a remote duty station located off the coast of Sardinia in the Straits of Bonifacio, Italy, is home to approximately 3,500 military members and their families.

This tiny, isolated island, once controlled by pirates, also serves as home port for Submarine Squadron 22 and USS *Simon Lake* (AS 33), the only forward-deployed submarine tender in the Mediterranean. Along with Naval Support Activity Gaeta, they provide mobile repair, weapons handling and logistic support for fast-attack submarines and a wide range of fleet support.

Because the Mediterranean is considered one of the strategic keys to Europe, North Africa and the Middle East, the base allows the Navy to monitor all shipping in the northern Mediterranean.

But the water isn't the only place where activity is going on.

▲ Shadows settle on La Maddalena's marina.



▲ Bicycles are a great mode of transporatation around the island.

For Sailors who choose to explore their new, exciting surroundings, or for those who prefer to take another direction, the adventure is only a flight or a ferry away.

La Maddalena's base activities are coordinated in conjunction with three surrounding islands, connected only by boat.

Sailors can reach the pictur-



▲ Summers attract tourists from around the world. The population swells from 17,000 to as much as 75,000 in mid-season.

esque Bay of Naples by catching an inexpensive over-night ferry or a one-hour military flight. An hour's drive from there will land you in the old seaport town of Gaeta, or Sailors can reach Sigonella by catching an hour flight into Catania.

Whatever your fancy, be it recreation, social or plain old R&R, La Maddalena or one of the nearby islands can provide it.

Sailors stationed on La Maddalena will still have to make a few adjustments to adapt to their new environment. Perhaps the greatest barrier and challenge for most will be the language. Italian is the predominant language spoken on La Maddalena, but outsiders can learn to speak it with a bit of practice and by keeping a small dictionary on hand.

Other customs are also slightly different. Handshaking, for instance, is the American greeting Sailors are used to. Italians often greet each other with kisses to both cheeks.

Sailors will also have to get used to the shops closing daily from 1 to 4 p.m. for *riposo*. It's the time of day locals eat lunch and take an often-needed break. But remember, for the military it's business as usual.

Houses and apartments are smaller than those stateside so Sailors are encouraged to leave oversized furniture in storage.

Students in grades Kindergarten through 8 attend La Maddalena American School. Ninth- through 12th-graders attend high school out of the area in one of the two accredited Department of Defense Dependent Schools (DODDS) in London or Rome. Some parents prefer to home school. Information on home schooling can be obtained from the school officer at the family service center.



For Sailors stationed at La Maddalena, it could be a dream tour if you're willing to learn the culture. Plan to attend a workshop before transferring to ease the move and become familiar with the customs. Soon you will be basking in the sun or enjoying the beautiful tropical views, crystal-clear waters and fabulous sunsets. ⚓

Story by Patricia Oladeinde, a staff writer for All Hands.

Major Commands

Naval Support Activity La Maddalena; Submarine Squadron 22; USS *Simon Lake* (AS 33)



Facilities

Commissary: Full Service
Exchange: Limited
Medical: Branch Clinic
Dental: Branch Clinic
Movie Threater: Yes
Shoppette: Yes
Banks and Credit Unions: Yes
Elementary/Middle School: DODDS La Maddalena American School
High School: DODDS London or Rome

Population: 3,200

Helpful travel hints:

* Service members MUST wear civilian clothing while traveling to Italy.
* Avoid T-shirts with American slogans or derogatory remarks.
* Do not mention you are military. The threat of terrorism exists throughout the world.
* Remove American stickers from baggage and use only your last name on luggage tags.



Destination...

Rota



Photo by PH2 Brett Siegel

The city's fortress offers a lovely view of the bay.



U.S. Navy photo

A bull stands amid a field of sunflowers near Rota.

If you're the type of Sailor who dreams of traveling to exotic and unforgettable liberty ports, then you're in luck. Naval Station Rota, Spain, is just the set of orders you've been looking for. After an exciting tour of duty in Europe's "Gateway to the Med," you'll be sure to leave with fond memories and a deep longing to return as soon as possible.

The naval base, located on the Bay of Cadiz in the southwestern part of the Iberian peninsula, overlooks the Atlantic Ocean and is strategically positioned near the Straits of Gibraltar. Its primary mission is to service the 6th Fleet by keeping fuel, ammunition and spare parts flowing to U.S. Naval Forces operating in the region.

But you probably won't be thinking about how important Rota is strategically when you're out running, swimming or just relaxing on one of the area's many white, sandy beaches. It probably won't cross your mind when you're out in town talking to the locals and learning the Spanish culture and language that Rota is one of the Mediterranean's busiest ports.

You'll find that Spaniards are a very friendly people. As long as you're courteous, adventurous and open to new living, dining and social experiences, they will go out of their way to help you acclimate to their culture.

Not long after showing up, you'll





U.S. Navy photo

◄ The playground at Rota's Child Development Center offers toddlers and young children a lot to do.

▼ A Rota Sailor enjoys the scenery from his apartment balcony.





U.S. Navy photo

quickly catch on to the fact that there always seems to be something to celebrate in Spain. Religious festivals, for example, play a major role in Spanish life. Each city and region has its own special fiesta in honor of a patron saint. There are colorful processions, singing, dancing, bullfights, fireworks and local delicacies like *churros* (sugary sweetbread).

One cultural extravaganza is Carnaval (the Spanish equivalant of Mardi Gras) where feasting and revelry are everywhere you turn. Celebrations include masquerade dances, parades, pinatas, costume contests street-singing parties and elections of kings.

If you're in search of a duty station with warm weather, friendly people and a great quality of life, look no further. Rota, Spain is that exotic, unforgettable liberty port you've been dreaming of. ⚓

Information compiled by JO2 Jason Thompson, a staff writer for All Hands *and JO2 Cindy Alvarez, USNR.*

At a glance

Major Commands
Naval Station Rota; Naval Computer and Telecommunication Area Master Station, Mediterranean Detachment (NCTAMS Med Det.); Fleet Air Reconnaissance Squadron (VQ) 2; Naval Hospital; Naval Security Group Activity (NSGA); Tactical Support Center (TSC); Air Mobility Support Squadron 625 (AMSS 625); Naval European Meteorology and Oceanography Center (NEMOC);Company 'F' Marine Support Battalion; Marine Corps Security Force Company (MCSFCO).

Population - 8,000

Facilities
Banking: Navy Federal Credit Union
Commissary: Full service (5 days/week)
Dental: U.S. Naval Dental Center, Europe Branch Medical Clinic, Rota
Exchange: Full complex, Navy Lodge
Family Service Center: Full service
Legal: Full service
Medical: U.S. Naval Hospital, Rota (Exceptional Family Member Program available)
MWR: full service
Base housing: Limited - 806 units comprised of two-, three- and four-bedroom units
Personnel Support Detachment: Full service
Religious Activities: full service
Spouse employment: Limited - but check DODD Schools, Human Resources Office, MWR and Navy Exchange. There is also an MWR Home Care Provider program.
Education: DODDS K-12; Air Force services for Exceptional Children (ages 3 to 21)
Navy Campus: full service
American Colleges/Universities: Central Texas College; City Colleges of Chicago; Embry-Riddle Aeronautical University; Rota Community College; University of Maryland's University College



Destination...

Sigonella



Photo by PH2(AW) Kristopher G. Sheets

You know you're living the good life when you get orders to a duty station where the Welcome Aboard web site has a page entitled "Sunny Sigonella: Getting Used to Warm Summers and Cool Winters." Located on the island of Sicily, the area enjoys a typical Mediterranean climate and averages 300 days of sunshine a year.

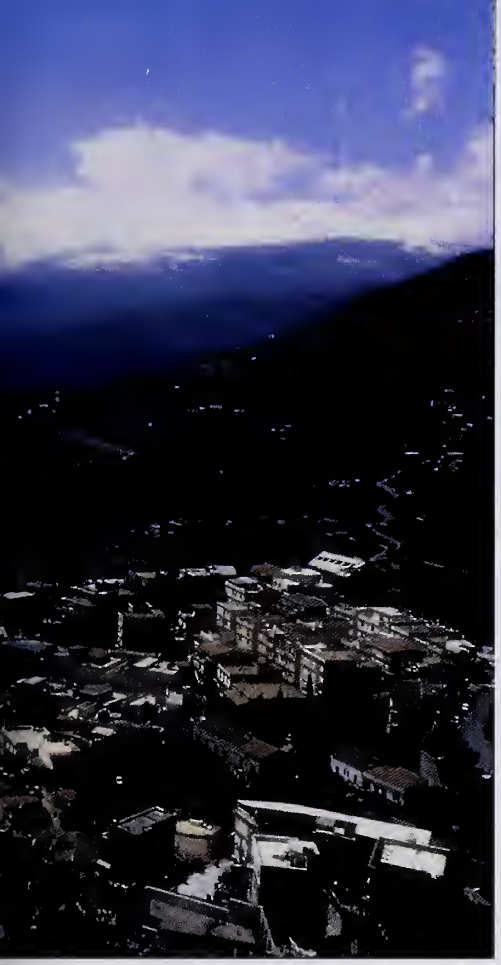
Great weather means great opportunities for Sailors and their families stationed at Sigonella. It's a chance to see many of the island's breathtakingly-beautiful, historic sights, most of which are within an hour's drive of the base. While you're out there you can meet the kind and very hospitable Sicilians and experience their diverse cultural heritage.

That heritage stems from Sicily's rich history, much of which was spent under foreign occupation — dating all the way back to the Greek Empire. That's why you can still find Greek temples, ancient catacombs,



Photo by PH2(AW) Kristopher G. Sheets

▲ Near to NAS Sigonella, is the town of Catania. Catania has many sights to see such as this 17th century statue of a pope in front of the St. Agata Cathedral.



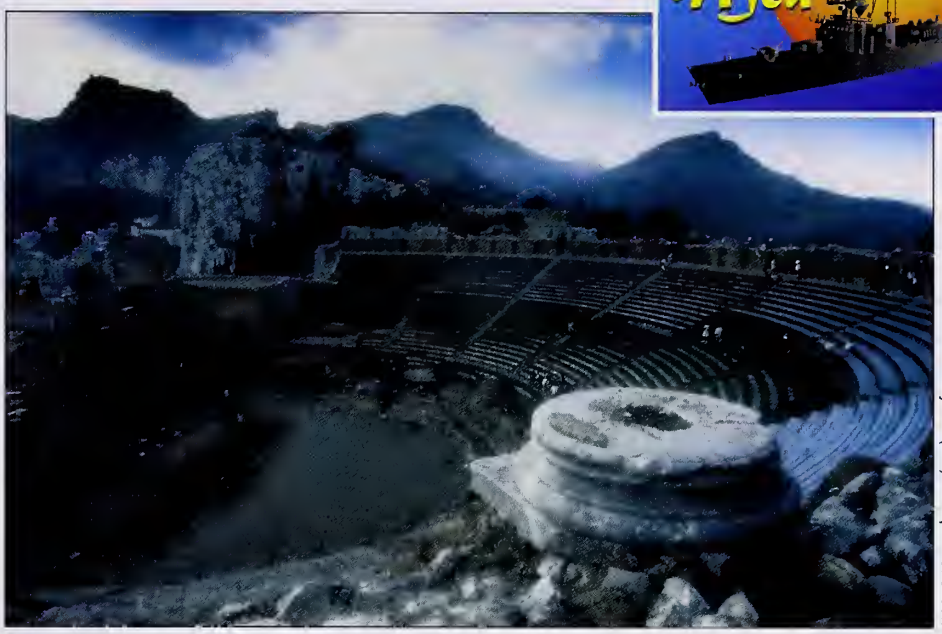


Photo by PH2(AW) Kristopher G. Sheets

◄ ▲ Within an hour's drive of NAS Sigonella, you can be in the beautiful city of Taormina and visit many attractions, like the Greek amphitheater (above) or you can just stop and look at at the view of the eastern shoreline of Sicily.



Photo by PHC(AW) Timothy Bloodworth

▲ The Greek amphitheater in Taormina with Mt. Etna in the background, less than an hours drive from NAS Sigonella.

Roman amphitheaters, Norman castles and Arabian baths throughout the island's modern cities.

Whether actively supporting 6th Fleet operations or playing frisbee on one of the island's soft, white-sand beaches, "Sunny Sigonella" is a dream tour. ⚓

Information compiled by JO2 Jason Thompson, a staff writer for *All Hands, and JO2 Marcy Kelley, USNR.*

At a glance

Major Commands:
Naval Hospital, Sigonella; HCS 4.

Facilities Available:
E-mail: welcom@nassig.sicily.navy.mil
INTERNET: http://www.sicily.navy.mil/
Commissary: Main and satellite commissaries, two 7-Day Stores (mini-marts)
Dental: Full service for active-duty military and their family members
Exchange: Full service
Family Service Center: Full service
Legal: Full service
Medical: U.S. Naval Hospital Sigonella and Flight Line Clinic
MWR: Full service
Personnel Support Detachment: Full service
Spouse Employment: Limited - predominantly MWR and Navy Exchange opportunities; spouse employment assistance program available
Veterinarian: Full service (limited availability)
Schools: K-12 at DODDS Stephen Decatur School
Navy Campus: Full service
American Colleges: Central Texas College; City Colleges of Chicago; Embry-Riddle Aeronautical University; University of Maryland University College; University of Oklahoma
Special Education: Limited to mild handicaps in speech and learning disabilities
On-base housing:
BEQ - 725 units, 15 to 24 month waiting list
BOQ - 200 units, 18 to 24 month waiting list



Gilla Gerzon makes two of her "children" feel at home.



Photo courtesy of USO-Israel, Image enhancement by Brett Siegel

Gilla Gerzon

Gilla Gerzon: Mother of the

Story by PH2 Brett Siegel, photos courtesy of USO-Israel

She looked around her upstairs office at the United Service Organizations (USO)-Israel, located in the northern port city of Haifa, and remarked that it looked as if burglars had ransacked the place. Hundreds of binders and photo albums were strewn haphazardly about; thousands of loose photos and handwritten letters covered nearly every inch of exposed furniture and floor.

The clock approached 6 a.m. For the last 12 hours, Gilla Gerzon had run the gamut of her emotions. Her tears flowed freely as she remembered days long gone by while pouring over pictures and letters sent to her from Sailors, Marines, husbands and wives, mothers and children. She would frequently pause to kiss the pictures dearest to her heart.

Nearly every Sailor and Marine who has served in the Mediterranean since 1980 either knows the name or the face of Gilla Gerzon, affectionately called the "Mother of the 6th Fleet."

Since formally establishing the Haifa USO and becoming its director in 1981, Gerzon and USO-Israel have provided support for more than 3.5 million service members.

Gerzon fondly refers to every Sailor and Marine who deploys to the Mediterranean as "her children." Sailors and Marines call her "Mom" and never forget to give her a good-bye hug as they return to their ships.

Recalling how nice and generous Americans were to her and her eldest daughter Gallit, Gerzon



Secretary of the Navy John Dalton visits with Gilla Gerzon.



The USO uses a liberty launch to greet Sailors.



Sailors and Marines escort Israeli military women during a USO fashion show..

said. "We came to America, not speaking any English. The nurses, they would sit in the room and teach us. They even let me stay in their houses."

Gerzon first became familiar with the U.S. Navy in the late 1970s when she worked as the public relations director at the Dan Carmel Hotel in Haifa.

"I saw all these American women and children in the hotel," said Gerson. "I asked them, 'Why are you in Haifa?' and they [would] tell me about meeting a Navy ship here for Christmas. I never knew the U.S. ships came [to Haifa] but I thought, 'How wonderful.'"

She soon found herself arranging the first of what would become many Christmas parties and tours of the Holy Land for Navy families. She realized this was the ideal way for her to repay the American people for all the warmth and comfort she and her daughter had received while in the United States.

A year later, members of the Navy Chaplain Corps, who had made previous visits to Haifa, asked the USO to hire Gerzon and establish a full-time office there.



Making Sailors feel comfortable in unfamiliar places is a primary concern of the USO.

Sailors and Marines arriving routinely receive long-stem roses from Gerzon and her staff. The refrigerator in the USO is always stocked for Sailors on shore patrol and sometimes Sailors are invited to celebrate a bar mitzvah or to visit a kibbutz while they are in port..

Gerzon and her family have gone out of their way to make Israel, and their own homes, a home away from home for service members. In the late 1980s she bought 60 mattresses and several oversized, commercial washing machines out of her own pocket so Sailors and Marines who missed the last bus or found themselves stranded ashore could sleep at her house.

Some say Gerzon is an angel, but she's quick to point out that she is caring for angels. Coincidentally, the words "Sailor" and "angel" are phonetically the same in Hebrew. ⚓

Siegel is assigned to the 6th Fleet public affairs office.

Not Your Grand

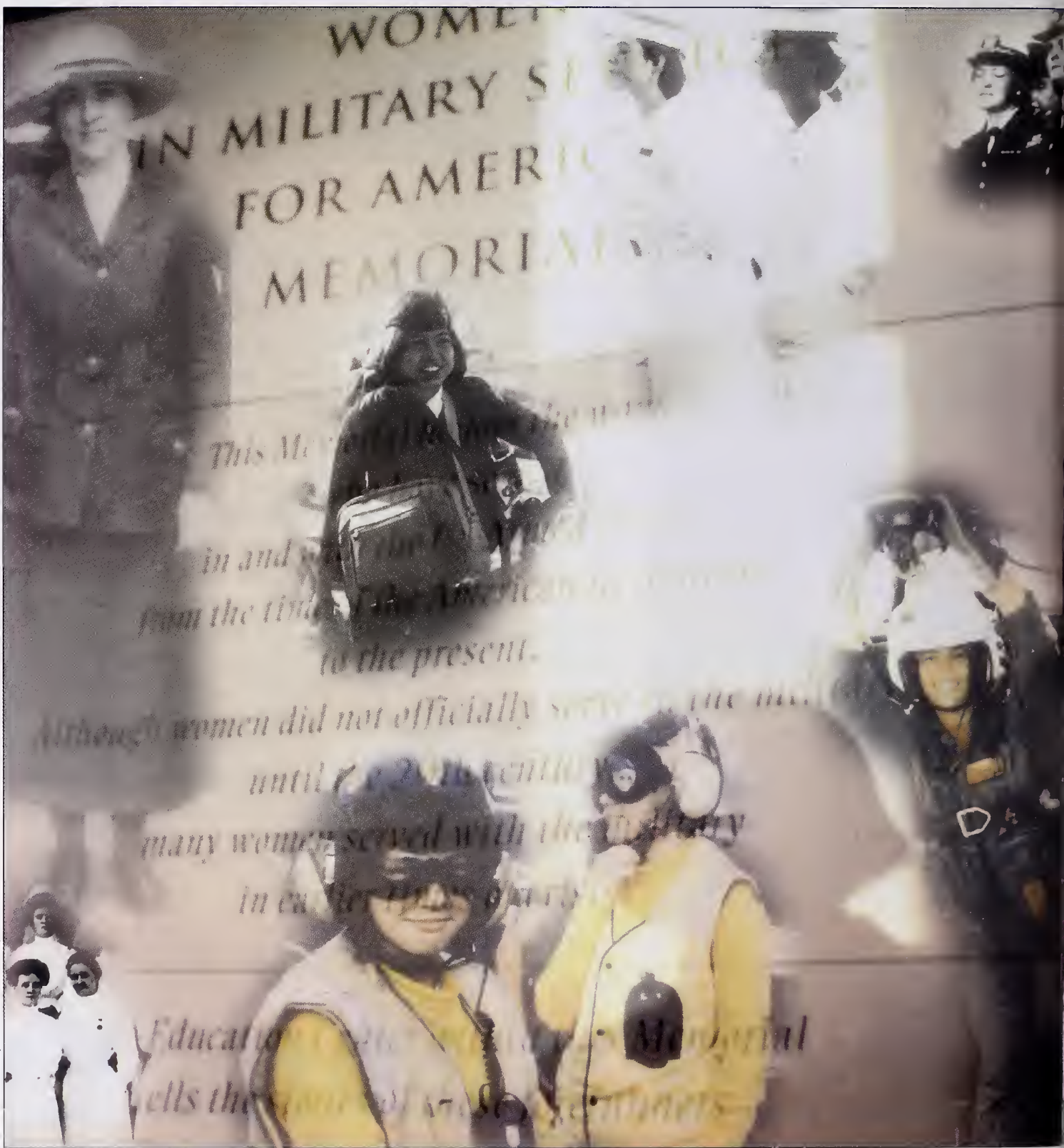


Photo illustration by JO2 Jason D. Thompson and PHAN Lena Gonzalez

mother's Navy



Story by PHAN Lena Gonzalez

Women in the Navy have come a long way since the first WAVES' movement in the early 1900s. Today they are forward deployed aboard combat ships, stationed overseas in high-risk areas and serving in nearly every rating the Navy has to offer.

Starting with the first 20 women to enlist in the Navy nurse corps (known as the "Sacred Twenty") women began by serving in "traditional jobs" like yeoman, storekeeper and hospital corpsman.



Photo by SMSGT Mamie M. Burke, OCJCS Photographer

Frieda Mae Hardin, 101 years old, was a Navy yeoman during World War I and spoke at the dedication of the Women's Memorial.

"When we went in, we didn't try to be equal with the men," recalled Florence Morkus, a first class communications specialist during World War II. "Our [mission] was to relieve the men. So when they went off to war, we took their jobs here in the States."

Whether it was running carbon copies and taking dictation during strategic-planning meetings or comforting Sailors wounded in combat, women proudly served their country any way they could.

As the years went by, women became a more and more integral part of the military community. Like men, they went off to war and left families behind.

During World War II, duties like sending and receiving coded radio messages to our Allied forces, rigging parachutes and testing equipment proved to be an invaluable part of the war effort.

Even though women weren't allowed to serve in combat zones, they played key support roles as aviation mechanics, gunnery instructors and translators. Women in highly technical ratings even helped design and manufacture weapons.

To be sure, the Honor, Courage and Commitment these early women demonstrated has paved the way for today's

Photo by PH3 Mark Hamilton



AC2 Jamie Bradley works with CATCC (Carrier Air Traffic Control Center) on board USS *Kitty Hawk* (CV 63). *Kitty Hawk's* battle group is currently en route to the Arabian Gulf as part of a scheduled deployment to the Western Pacific and Arabian Gulf.

Photo by PH2 Felix Garza Jr.



A flight deck crewmember carries aircraft tie down chains during flight operations on USS *Nimitz*.



Navy women.

"Without their service and dedication, the rest of us would not have followed," said retired Navy CAPT Kathleen Bruyere, who now resides in Baltimore. "Today someone can say she wants to become an astronaut and nobody would blink an eye. But in 1966 women could not even fly. It was much different then."

Because of the sacrifices and hardships endured by every woman who has ever put on a uniform, Navy women have now taken their place alongside their brethren Sailors.

Seaman Apprentice Valerie Mason, a 19- year-old Sailor from Hazelhurst, Miss., who performed in the Ceremonial Honor Guard detail at the unveiling of the Women in Military Service for America Memorial in Washington, D.C. said, "I never realized how different the Navy was back then. At least I know now that I have as a good a chance as anyone to make it." ⚓

Gonzalez is a photographer for All Hands.



▲ Posters like these were designed to attract women for critical roles deemed appropriate for their gender.



Photo by PHAN Laurie L. Wood



On a four-acre site at the entrance of Arlington National Cemetery in Arlington, Va., stands the Women in the Military Service for America Memorial. It was built to honor the more than 1.8 million American women who have served, or are serving, in the Armed Forces, beginning with the women of the Revolutionary War. The 21.5 million-dollar memorial designed by New York architects Ms. Marion Gail Weiss and Mr. Michael Manfredi was dedicated Oct. 18, 1997. The memorial consists of a reflecting pool, a curved gateway and an arc of glass tablets etched with quotations by and about women who have served in the Armed Forces. Four staircases pass through a hemicycle wall allowing visitors a panoramic view of Arlington National Cemetery with the Washington's Monument in the distance.

The memorial's Education Center houses the Hall of Honor, which contains many exhibits displaying the progress of women in the military, as well as numerous artifacts like old uniforms, official orders and military ID cards used by past generations of service women.

Any military woman may register with the memorial at any time.

Donations and registrations of service women can be sent to: Women in the Military Service Memorial, Dept. 560, Washington, D.C. 20042-0560, or you can call toll free at 1-800-4-Salute. WIMSA can be located on the Internet at wimsa@aol.com.

◄ PH1 Candice M. Pratt checks navigational flight equipment during an auxiliary power unit startup. Pratt is assigned to Patrol Squadron (VP) 26, Brunswick, Maine, in support of Joint Interagency Task Force East.

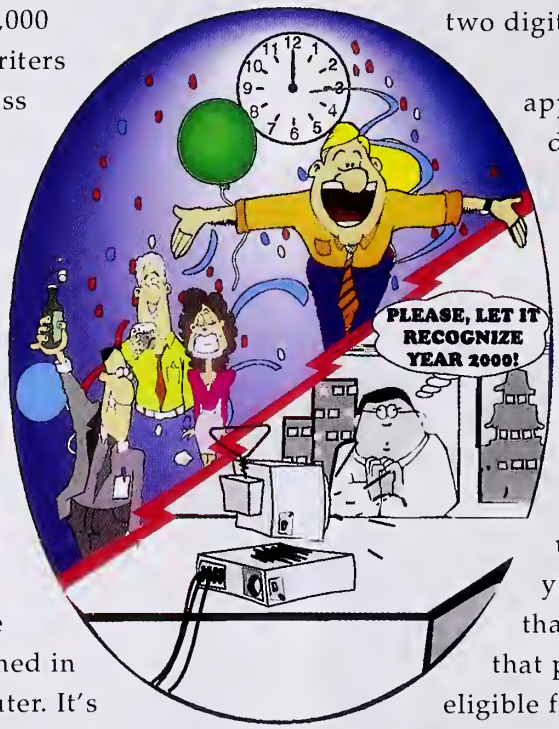
Y2K

The Year 2000

The challenge is on!

Story by JOCS Steve Burghardt

Jan. 1, 2000. What a pain! Supermarket tabloids print dire predictions while politicians drone on about fresh starts and new beginnings. Groups of "millennialists" and "futurists" are springing up everywhere and developing plans for humanity during the next 1,000 years. Closer to home, check writers will have to make sure they cross out that little "19" on the date line. Award certificates will have to be revised and reprinted to accommodate the change. Come to think of it, almost every dated form we fill out will become obsolete.



But it's not just inconveniences the world is concerned about when it comes to the Year 2000, or Y2K as it is called. Some of the hazards posed by the new millennia are being felt today and are contained in that magic box we call a computer. It's the "millennia bug" and we're all about to catch it.

To understand the problem, it's necessary to revisit a little computer history. Back in the early days of the computer boom, memory was expensive and the processing speeds of the venerable Intel 8086 chip were at a snail's pace. To save memory and storage space, as well as speed calculations, programmers opted to represent years by their last two digits. Thus, 1975 became 75.

The use of dates in many applications is essential. Some use dates for sorting data while others use dates for calculating the passage of time. For instance, a person born Jan. 1, 1970, is now 28 years old (1998 minus 1970 equals 28). A computer might see this problem as 98 minus 70 and get the same result. However, in 2000 the calculation changes to 00 minus 70 and ends up with a result of negative 70-years-old! For those applications that ignore the negative number, that person is now 70 years old and eligible for mandatory retirement, Social Security, etc. If the "negative" age remains, then the poor individual is some 69 years, 3 months away from conception.

Compounding the problem of Y2K is the fact that

some systems do not accurately compensate for leap years, of which 2000 is one. This inability to change the numbers of day in a year (366 vice 365) could be felt in any number of ways, from pay and interest calculations to inventory control and logistic systems.

The computer is to modern society what fire was to prehistoric times — indispensable. To the Navy, the computer is the centerpiece of most everything Sailors do. A deck seaman may not need a computer to paint the hull, but it was probably a computer that told someone it was time for some preventative maintenance and ordered the paint. Computers are now integrated into all Navy aircraft and into shipboard systems for fire and damage control. Even air conditioning systems and traffic lights are potentially at risk when Y2K rolls in.

As dark and foreboding as the prospects may seem, the Navy is already at work eliminating the problem worldwide. While individual commands and organizations work to elminate the Y2K bug from their "mission critical" and "mission support" systems, the Chief of Naval Operations (CNO) N-6 staff is pursuing ways to integrate and share Navy efforts more completely, from targeting systems to pay.

Integration is essential in today's digital environment. Shipboard computer networks routinely send and receive data from other ships and shore-based support facilities. One ship may be Y2K ready, but it can still catch the "bug" if it receives data from another ship or shore system which is not. Once "infected" data is brought into the system, the ship's network could potentially be corrupted and damaged, and possibly affect the ship's ability to fight. With the profusion of e-mail transmitting data worldwide, the potential for sending incorrect information is multiplied many fold.

The Navy's Y2K management plan consists of a five-phase approach to address the problem and involves all Navy personnel from the most senior leadership to the deckplates.

The initial phase, **awareness**, is aimed at making sure everyone in the Navy — military and civilian — are aware of the nature of the Y2K "bug."

Follow-on phases include **assessment** (finding faulty systems and software); **renovation** (installing upgrades to systems and software, or finding replacements for those which cannot be upgraded economically); **validation** (testing and verifying the upgrades and replacements); and **implementation** (deploying the upgrades or new systems and making sure all interrelated systems work together).

The Navy's plan calls for all "mission critical" systems to have implemented by Dec. 31, 1998, one year from the absolute deadline of Dec. 31, 1999. "Mission support" systems must be implemented by Mar. 31, 1999.

According to CDR Jim Gillcrist, the CNO N-6 Y2K action officer, "The Y2K problem is an enterprise-wide issue that requires participation by the entire chain of command."

Yes, Y2K could be a big pain. It's a problem that won't go away. The clock's ticking. ... ⚓

Burghardt is the assistant editor of **All Hands**.



Test your home PC

Not sure if your home computer is ready for Y2K? Try this simple test.

Step 1: Change you computer's clock to 11:59 p.m. on Dec. 31, 1999. Let the clock run into the "next" year. Check it and see if it displays "1 Jan. 2000."

Step 2: Now, shut down your computer and then power back up. Check the clock again. It will probably accurately display the correct time, but what about the date? Is it still 1 Jan. 2000...or 1 Jan. 1980 or 1900?

Step 3: Check a Windows application. After you rebooted your system, create a file with notepad and save it. Now open File Manager (or Explorer if you use Win95) and look at the details of the file you just created. Also look at the file's location. Is it at the top as the newest document created? Or is it at the bottom, next to the oldest?

Don't assume your computer is ready for Year 2000. If you find that you might have problems, contact the manufacturer about ways to fix them now.


OPERATIONS
NAVAL STATION
NORFOLK, V.A.

New rules set for ESWS program

Story by JO2 Robert W. Garnand

Recently, Sailors from the Atlantic and Pacific Surface Fleets gathered at Naval Station San Diego to start working on improvements to the Enlisted Surface Warfare Qualification (ESWS) program.

The San Diego workshop was one of many Navy-wide workshops being conducted this year to support the CNO's initiative to improve the Navy's enlisted warfare qualifications programs. The workshops are producing ship type, airframe and mission specific PQS packaged that will streamline the requalification process and be an integral part of the Sailors' initial warfare qualification.

"The changing times is the driving force behind these changes," said Master Chief Yeoman Manuel Rodriguez, the Force Master Chief for Naval Surface Force, U.S. Pacific Fleet. "The MCPON, along with the fleet and force master chiefs, got together and made a recommendation to the CNO that we were due for a change in our qualification program."

Master Chief Machinist's Mate Bob Hallstein, the Force Master Chief for Naval Surface Force, U.S. Atlantic Fleet, added, "In our Navy, we're streamlining our warfighting capability; we're modernizing it, and I think it's the right time to take all of our warfare programs and look at how we do them, what they give the Sailor, how they improve our warfighting capability and how they connect to mission readiness."

For Sailors in senior enlisted leadership to play a role in the primary mission of their ship, they must be warfare qualified and keep their qualification current. This is the major emphasis of the changes to the warfare qualification programs.

One significant change is the establishment of a common core Personal Qualification Standard (PQS). The PQS will be the foundation of the enlisted warfare qualifications. In the ESWS community, this common core PQS will center around five major areas common to most shipboard environments: combat systems, deck, engineering, operations and supply.

Additionally, Chief of Naval Operations (CNO) policy mandates that all Sailors assigned Type 2 or 4 sea duty be qualified in a unit's primary warfare mission and common core PQS prior to advancement to E-6 or higher.

"We're not rewriting the warfare program because it's mandatory for advancement," said Hallstein. "Being mandatory for advancement is a requirement placed under the advancement system — not the enlisted warfare programs. Our goal is to help them become better Sailors — better educated, better warriors."

For the initial qualification, Sailors must complete the PQS prerequisites, a written exam and an oral board. In most cases, for following tours of duty, Sailors requalify by completing ship/unit specific PQS and demonstrating the basic knowledge every Sailor should know.

The focus of requalifying "is the continuous improvement of the Sailor," says Hallstein. "We want to make every Sailor understand what's going on and how to fight his or her ship."

The workshops consisted of enlisted Sailors, E-6 through E-9, who are subject matter experts in their rate on the platform of interest, from both the Atlantic and Pacific surface fleets.

"The changes being made are by Sailors wearing the ESWS warfare device," Hallstein said.

Individual ship type and airframe-specific PQS packages are being developed by working groups composed of subject-matter experts, TYCOM, OPNAV and BUPERS representatives as well as NETPDEC PQS format specialists.

The PQS required to initiate the program, as well as the new OPNAV instruction is nearing completion and should reach the fleet by this summer. ⚓

Garnand is assigned to Naval Surface Force, U.S. Pacific Fleet, Pearl Harbor.

'Tis the Season ... f

Paying taxes is a time-honored tradition in America. Everyone pays - even Sailors.

As always there are changes to the filing procedure this year. Some of the 1997 changes won't take effect until the 1998 tax year that began Jan. 1, 1998, but Sailors should know about them now. To lessen the hassles of tax forms and filing procedures, Sailors can get help from a number of sources.

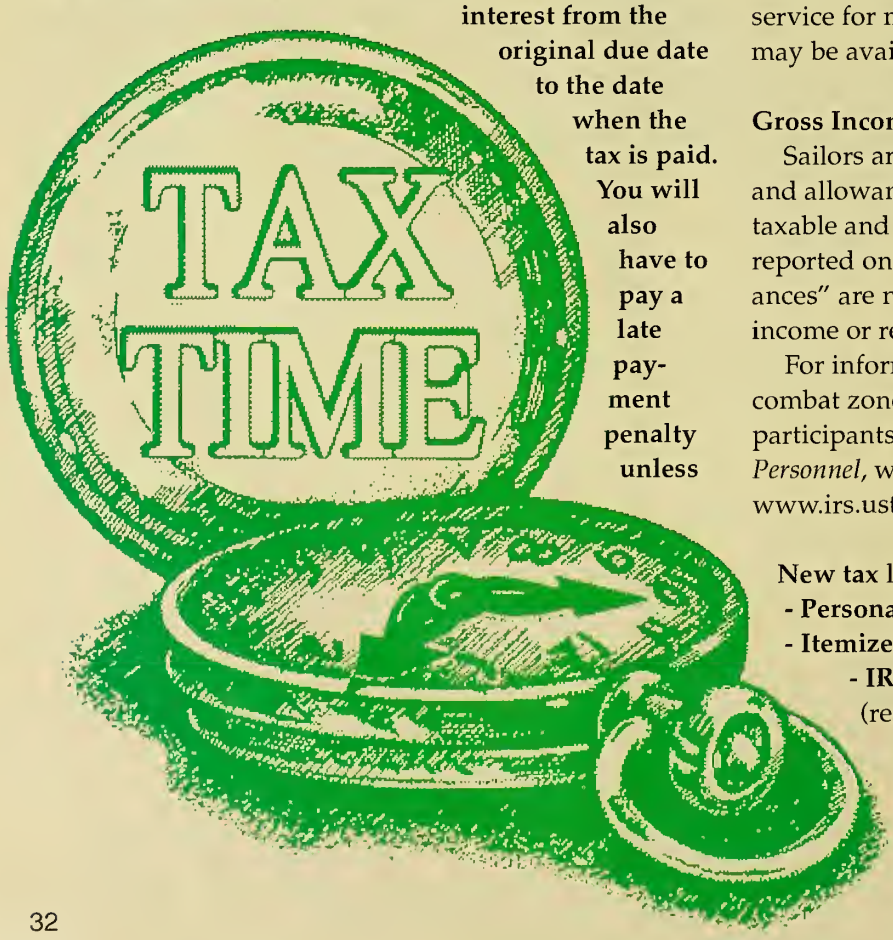
The Internal Revenue Service (IRS) provides these helpful tips for active-duty military personnel to remember:

When to file:

- The deadline for filing is April 15, 1998, for most people. You have to apply to the IRS, using IRS Form 4868 for an extension.

- Military members living overseas can qualify for an automatic extension to June 15, 1998, without filing Form 4868.

Remember: Having an extension to file your taxes does not mean you have an extension to pay any tax due. You do not have to send in any tax payment after you estimate your tax due on Form 4868. But, if you pay the tax after the original due date, you will be charged interest from the original due date to the date when the tax is paid. You will also have to pay a late payment penalty unless you pay at least 90 percent of your tax liability by the original due date of the return.



- An additional two-month filing extension of Aug. 15, 1998, will be granted if Form 4868 is filed by April 15 (CONUS), or June 15, if you are (OCONUS). If you need time past Aug. 15, an additional extension request can be made by using IRS Form 2688. For more information, pick up a copy of IRS Publication 3, *The Armed Forces' Tax Guide*.



W-2s and you:

Beginning last year, W-2s included Basic Allowance for Quarters (BAQ) and Basic Allowance for Substance (BAS) totals in a separate block for use in computing Earned Income Credit (EIC) eligibility. Sailors should have received their tax instruction booklets and W-2s in the mail in January. If you've moved, the package may arrive after the filing deadline. To get forms and instructions mailed to you, contact the IRS at 1-800-829-3676, or visit their website at www.irs.gov. Check with your local legal service for more information. IRS forms and instructions may be available through your community library.

Gross Income:

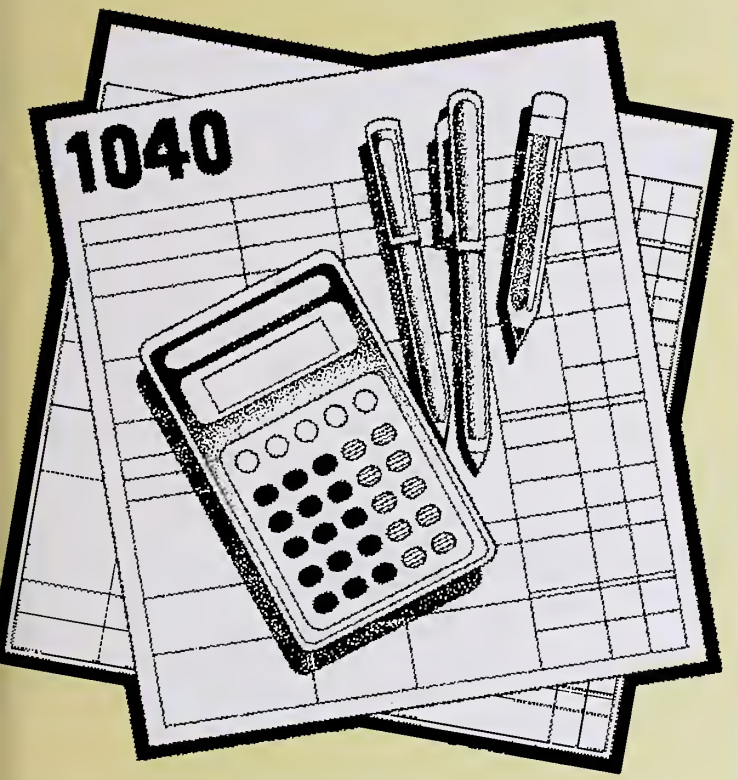
Sailors around the world receive different types of pay and allowances. In general, items identified as pay are taxable and included in gross income. All income must be reported on your tax returns. Items identified as "allowances" are not taxable and are not included in gross income or reported on your tax return.

For information on the exclusion of pay for service in a combat zone and other tax benefits for combat zone participants, see *Publication 3, Tax Information for Military Personnel*, which can be downloaded at www.irs.ustreas.gov/prod/forms_pubs/index.html.

New tax laws — changes for 1997:

- **Personal exemption:** increased to $2,650
- **Itemized deductions:** increased to $121,200
- **IRA limits:** $2,000 per spouse, $4,000 total, (regardless if both spouses work).
- **Earned Income Credit (EIC):** Every family member claimed as a dependent must have a Social Security Number (SSN) for 1997, regardless of when they were born. If

r filing taxes



an SSN is falsified, EIC will be denied for the next 10 years.

- **New EIC limit:** no children, $9,770; one child, $25,760; two or more children, $29,290. Persons with investment income of more than $2,250, may not claim EIC.

- Capital gains distributions must be reported on Schedule D.

- **Capital gains rates:** long-term capital gains rates reduced to 20 percent (10 percent for taxpayers in 15 percent tax bracket).

- **Capital assets holding periods:** May 7, 1997, to July 28, 1997, lower rate applies to assets held more than 12 months. July 29, 1997, and later, lower rate applies to assets held more than 18 months. Capital gains assets held less than 18 months are taxed at 28 percent.

- **Sale or exchange of principle residence:** Before May 6, 1997, subject to old rules; May 6, 1997, to Aug. 5, 1997, transition period (choose old or new). After Aug. 5, 1997, first $250,000 ($500,000 if married filing joint) of capital gain on the sale of a principle residence is not taxed. ⚓

Compiled by JO2 Jeremy Allen, a staff journalist assigned to All Hands.

Filing Shortcuts

During 1998, 139 legal service offices, family service centers, ships and individual shore commands will offer free tax preparation assistance, including electronic tax filing. This is the fourth year the Navy has offered this service to Sailors and Marines.

Have you waited too long

For Sailors who don't have time to fill out the 1040 (long) form, there's is now a better, faster, more efficient another option — the electronic filing system (ELF) gives Sailors the option of filing their taxes electronically.

The office of Navy Judge Advocate General says you should look into ELF for quick returns and refunds. ELF reduces the number of tax-related problems encountered by Sailors. Best of all, Sailors pay no fee for preparing or transmitting ELFs.

All ELF returns are transmitted electronically via modem to a stateside transmitter, then retransmitted to the IRS. ELF returns are generally accepted by the IRS within 24 hours of the time you send them to the stateside transmitter. The accuracy rate is 99.5 percent. Sailors who use ELF reduce many tax-related problems.

With ELF on 45 ships this year, Sailors can file electronically during extended at-sea operations and have their refund electronically deposited in their bank account about nine days later.



ELF has saved Sailors more than $100 per return on average. Last year, almost 92,000 Sailors took advantage of the Navy's ELF services. This figure doesn't include the value of assistance provided to Sailors filing paper federal and state returns, which numbered more than 30,000 last year.

Electronic tax filing will be available at most CONUS shore installations and at 19 overseas shore installations. It's expected that 45 ships will offer ELF services. See Page34 for a list of confirmed ELF sites.

Afloat Legal Office Sites:

USS *Independence* (CV 62)
USS *Kitty Hawk* (CV 63)
USS *Constellation* (CV 64)
USS *Enterprise* (CVN 65)
USS *John F. Kennedy* (CV 67)
USS *Nimitz* (CVN 68)
USS *Dwight D. Eisenhower* (CVN 69)
USS *Carl Vinson* (CVN 70)
USS *Theodore Roosevelt* (CVN 71)
USS *Abraham Lincoln* (CVN 72)
USS *George Washington* (CVN 73)
USS *John C. Stennis* (CVN 74)
PCU *Harry S. Truman* (CVN 75)
USS *Mount Hood* (AE 29)
USS *Seattle* (AOE 3)
USS *Detroit* (AOE 4)
USS *Simon Lake* (AS 33)
USS *Frank Cable* (AS 40)
USS *McKee* (AS 41)
USS *Vincennes* (CG 49)
USS *Antietam* (CG 54)
USS *San Jacinto* (CG 56)
USS *Princeton* (CG 59)
USS *Cowpens* (CG 63)
USS *Shiloh* (CG 67)
USS *Elliott* (DD 967)
USS *Oldendorf* (DD 972)
USS *John Young* (DD 973)
USS *Arleigh Burke* (DDG 51)
USS *Stethem* (DDG 63)
USS *Benfold* (DDG 65)
USS *George Philip* (FFG 12)
USS *John A. Moore* (FFG 19)
USS *Simpson* (FFG 56)
USS *Tarawa* (LHA 1)
USS *Nassau* (LHA 4)
USS *Peleliu* (LHA 5)
USS *Wasp* (LHD 1)
USS *Boxer* (LHD 4)
USS *Portland* (LSD 37)
USS *Mt. Vernon* (LSD 39)
COMSIXFLT, embarked on USS *LaSalle* (AGF 3)
COMSEVENFLT, embarked on USS *Blue Ridge* (LCC 19)
COMPHIBRON 5, embarked on USS *Essex* (LHD 2)
SUBRON 6, embarked on USS *Emory S. Land* (AS 39)

Navy Legal Service Centers

Naval Legal Service Branch Office (NLSO), Bahrain
NLSO Det., LeMoore, Calif.
NLSO Southwest, San Diego
NLSO Northeast, Groton, Conn.
NLSO Det., Guantanamo Bay, Cuba
NLSO London, England
NLSO Southeast, Jacksonville, Fla.
NLSO Southeast Det., Mayport, Fla.
NLSO Southeast Det., Cecil Field, Fla.
NLSO Southeast Det., Orlando, Fla.
NLSO Central, Fla.
CSS Panama City, Fla
NAS Whiting Field, Fla.
NTTC Corry Station, Fla.
NLSO Det. SE, Kings Bay, Ga.
NLSO Det., Guam
NLSO Mid Pacific, Pearl Harbor
NLSO Mid Europe and Southwest, Naples, Italy
NLSO Det., Sigonella, Sicily
NLSO Great Lakes, Ill.
NLSO Sasebo, Japan
NLSO Northwest Pacific, Yokosuka, Japan
NLSO Brunswick, Maine
National Naval Medical Center, Bethesda, Md.
NAS Patuxent River, Md.
NLSO Det., Roosevelt Roads, Puerto Rico
NLSO Det., Newport, R.I.
NLSO Det. SE, Charleston, SC
NLSO Det., Rota, Spain
NLSO Det., NAS Memphis, Tenn.
NLSO Corpus Christi, Texas
NLSO Mid Atlantic, Norfolk
NLSO Northwest, Wash.
NLSO Det., Wash.
NLSO National Capitol Region, Washington, D.C.

Family Service Centers/Other sites

CINCPACREP, Australia/Japan
U.S. DAO, Buenos Aires, Argentina
FSC China Lake, Calif.
FHIBCB 1 (ACB 1) Coronado, Calif.
Naval Air Reserve Santa Clara, Moffett Field, Calif.
NAWS Point Mugu FSC, Point Mugu, Calif.
FSC Port Hueneme, Calif.
Sub Training Facility, San Diego
Naval Weapons Station Seal Beach, Calif.
U.S. NAMRU-3 Cairo, Egypt
FSC Key West, Fla.
Barking Sands Pacific Missile Range Facility, Kekaha, Hawaii
NAWC Aircraft Division, Indianapolis
FSC Gaeta, Italy
FSC LaMaddalena, Sardinia, Italy
COMFLEACT Chinhae, Korea
FSC NSA New Orleans
NCTS Cutler, Maine
NSGA Winter Harbor, Maine
U.S. Naval Academy, Annapolis, Md
NAVEODTECHDIV Indian Head, Md.
NFSC Gautier, Miss.
FSC Gulfport, Miss.
COMNAVMETOCCOM, Stennis Space Center, Miss.
Portsmouth Naval Shipyard, Portsmouth, N.H.
FSC Naval Weapons Station Earle, Colts Neck, N.J.
FSC Lakehurst, N.J.
STRATCOM WING 1, Tinker AFB, Okla.
FSC, Ingleside, Texas
NSGA Medina, San Antonio
NFSC, NW NSGA-NW Chesapeake, Va.
NFSC Dahlgren, Va.
NFSC Little Creek, Norfolk
NFSC NAS Oceana, Va.
FSC Naval Weapons Station Yorktown, Va.
Trident Training Facility Bangor, Silverdale, Wash.
FSC, NAS Whidbey Island, Wash.
NSGA Sugar Grove, Sugar Grove, W.Va.
Legal Assistance Division (JAG 36), Alexandria, Va.
Naval Support Force Chalet, McMurdo Station, Antartica
Navy Post Graduate School, Monterey, Calif.
COMNAVSURFPAC, San Diego
Naval Support Facility, Diego Garcia
CINCUSNAVUR NSA, Souda Bay, Greece
NAS Barbers Point, Hawaii
Commander, Submarine Forces Pacific, Pearl Harbor
NAS Keflavik, Iceland
NAF Atsugi, Japan
NS Annapolis, Md.
NAS Meridian, Miss.
NAS Fallon, Nev.
Naval Nuclear Power Training Unit, Ballston Spa, N.Y.
NASU Christchurch, New Zealand
NAS Joint Reserve Base, Fort Worth, Texas
NAS Kingsville, Texas
COMNAVCRUITCOM, Arlington, Va.
CINCLANTFLT, Norfolk
Special Boat Squadron 2, Norfolk
Naval Computer and Telecommunications Command, Washington, D.C.

Source: Office of the Judge Advocate General

Tax changes coming for 1998 tax season:

- Dependent child credit
- Education benefits: hope credit, lifetime learning credit, education IRAs, student loan interest
- IRA changes, spouses covered by employer plan, ROTH IRA, penalty-free distributions
- Increased standard deductions for dependents
- Foreign earned income exclusion increase
- Estimated tax penalty relaxed (no penalty unless owed $1,000 or more in '98, up from $500 in '97)



CyberSailor

Solving a taxing problem

Every year it's the same thing. While I'm waiting for the Navy to deliver my W-2 forms, I have every intention of getting my taxes done and in the mail by the first of February. Well, so much for good intentions! I don't think I've ever gotten it done before mid-March (usually it's in the mail by the April 15th deadline).

In spite of good intentions, this is how it works. I run to the post office to find all the forms, schedules and instructions I need. Then I run to the library because all the forms, schedules and instructions I need weren't at the post office. Once I've found all the paperwork (can I claim the mileage as part of "tax preparation" expenses?), it's time for a quiet and relaxing evening of reading the newest version of the IRS tax instructions, restrictions, computations ... and contradictions! Oh, how I look forward to that ... my eyes end up taking on that "not really here" look and my head begins rocking slowly, but forcibly, against the nearest wall.

But this is 1998! We have a new ally in the fight against time and bureaucratic double-talk! It's our friend, the Internet!

OK, we have to file tax returns. There's no way around it. So let's make it as easy as possible. First stop, the trusty and ever-present search engine.



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[Text Only Version]

IN TODAY'S ISSUE

Employment Opportunities

IRS WANTS YOU

IRS Problem Solving Day

Relief From The Symptoms Of Long Standing Tax Problems.

TAX PRO'S Corner

Surprised Sailor Finds IRS TaxFax Service Waiting In Every Port

AGANA, GUAM When Seaman Barry Barkentine needed a few extra Federal Income Tax forms he thought he would have to wait until his parents could mail them from home. Hard to tell how long that might take, you see, Barry was somewhere near 15 degrees

I searched for "taxes" and got a lengthy list of levy links (Yeah, I know, I have too much time on my hands). I found one that intrigued me entitled "Essential Links - Taxes." You can find that site at *www.el.com/elinks/taxes/* and be treated to pages and pages of useful references. Everything from major tax sites to state tax pages to the actual U.S. tax code is listed.

Although all the links listed at this site are good, some of the best are worth mentioning below —

For all-around tax information, tips and hints, forms, and links to state tax sites, you might want to check out 1040.COM (*www.1040.com*), Taxweb (*www.taxweb.com*) or Ernst & Young's Tax Services (*www.ey.com/tax*). All three offer articles and frequently asked questions (FAQs) on federal and state tax laws and filing requirements. They also have lists of web addresses for state tax boards where you can download forms, instructions, etc.

If, while digging through all this "taxing" terminology, you want a little break, try the "Tax Toons" page at the Ernst & Young site. If you've ever suffered from the allusion that accountants don't have a sense of humor, you'll find you're wrong. They do have a sense of humor ... it's just a bit different.

There's one place I haven't mentioned up to this

Get your 1040 electronically

When you visit the Internal Revenue Service's web site, you'll be able to download all the forms, publications and instructions you'll need to file your income tax this year. Need forms or publications from previous years? Not to worry, because the IRS has kindly included all the paperwork for 1992 to 1996 as well.

There are a number of formats these files come in, but I've found that the easiest for most of us to use is the *PDF* file format. This format is generated by Adobe's Acrobat software and is used by many organizations to distribute news, information and forms. Navy News Service, for instance, is distributed this way and allows ships to download news already laid out and ready for copying.

Yep, PDF files are very handy and are becoming the common way to distribute documents at some sites. But you need the Adobe Acrobat Reader to use them. No, it's not another corporate plot to make you buy more software — the program is F-R-E-E! What does that mean to you? It means you'll have to download and install the program on your computer.

Before you start complaining of headaches and assorted other reasons to avoid downloading the program, let me tell that it's easy. Here's how:

Step 1: Head over the to Adobe web site (www.adobe.com). There's even a link to it from the IRS's forms page.

Step 2: Find and click on the yellow "Get Acrobat Reader" button.

Step 3: Follow the link to register. Hey, like most software company's who give away programs, Adobe wants to know who's getting it. They don't ask for credit card numbers, just name and some information about yourself and your computer.

Step 4: Choose your desired software program (Acrobat Reader 3.01), platform (Windows 95, Mac, Unix, etc.), and language (English)

Step 5: Select download. You will probably be asked whether you wish to run the program or save it to disk. I recommend you save it to a temporary folder and make sure you use your antivirus program to scan the file before proceeding.

Step 6: Close all your programs and run the program. If you need specific instructions, there's an installation guide available.

There now, you're done and ready to get those 1040s from the IRS. Acrobat Reader will allow you to view and print the forms. Sorry, but you'll need to purchase more software (*Adobe Acrobat*) to change the files you have downloaded.

point. We all know it — those three letters that conjure up images of lightning over a darkened landscape, of people in drab suits carrying briefcases and calculators — the I-R-S!



I went to the IRS website! No, I'm not crazy! What I found was probably the coolest and most informative site out there. Each day, the IRS publishes *The Digital Daily* (www.irs.ustreas.gov/prod/cover.html) filled with tax info, news and, of course, forms. Through this site, you can download most of the IRS publications *like Publication 3: Armed Forces' Tax Guide*. I have just one hint on downloading the forms and publications: all are available in a number of formats, but the .PDF format is by far the easiest and most convenient to download and print. There's even a link to Adobe to download the free (yes, I said FREE) Acrobat Reader you'll need to view and print the .PDF files.

This is truly a taxing time of year. But the Internet can make it an easier and, perhaps, more profitable time. So, what are you waiting for? Get connected to the electronic tax man! ⚓

Eye on the Fleet



Photo by PH2 H. Wolfgang Porter

➤ Lookouts aboard USS *Salt Lake City* (SSN 716) keep a watchful eye on the busy shipping lanes as they steam toward their homeport in San Diego.



Photo by PH3 Mike Larson

◄ An SH-60B *Sea Hawk* attached to Light Helicopter Antisubmarine Squadron (HSL) 44 assesses battle damage after launching an AGM-114 *Hellfire* air-to-ground missile at a training target during *Joint Task Force Exercise (JTFX) 98-1.*

▼ AN Mirna Gonzales from Tularosa, N.M., updates a flight deck status board while coordinating placement of aircraft during fueling operations on board USS *Nimitz* (CVN 68).



Photo by PH3 Cynthia R. Zarate



Photo by PHAN Benjamin F. Story

▲ AC2 Mark McDaniel, from Cleveland, keeps tabs on strike fighter and support aircraft around the aircraft carrier USS *Nimitiz* (CVN 68).



Photo by PHC Larry Nixon

▲ A Landing Craft Air Cushion (LCAC) backloads equipment and personnel to the amphibious assault ship USS *Peleliu* (LHA 5) following the amphibious exercise *Eager Mace '98* off the coast of Kuwait. The amphibious readiness group is currently deployed to the Arabian Gulf in support of Operation *Southern Watch.*

Eye on the Fleet

➤ AO2 Edgar Corley from Hubert, N.C., performs a systems check on an SH-60B *Seahawk* from Anti-Submarine Helicopter Squadron (HS) 11 aboard USS *George Washington* (CVN 73).



Photo by PH3 Sammy Dallal



Photo by PHAN Joe Hennessey

▲ A hose team from a repair locker forms up during a mass conflagration drill on board the aircraft carrier USS *George Washington* (CVN 73).



Photo by PH2 Keith W. Devinney

▲ BT3 Cook, control center supervisor at Naval Station Rota, Spain's brig facility, monitors the whereabouts of all personnel within the building and controls access to the secured spaces.





Photo by PH3 Joseph Hendricks

▲ A pilot from Fighter Squadron (VF) 102 gives his F-14B *Tomcat* a pre-flight inspection. USS *George Washington* (CVN 73) and its embarked Carrier Air Wing (CVW) 1 are operating in the Arabian Gulf to support U.N. sanctions against Iraq.

Around the Fleet

FHTNC reaches milestone

NORFOLK — The Fleet Home Town News Center (FHTNC) reached a milestone in 1997 by releasing more than 1 million hometown news stories about Sailors, Marines and Coast Guardsmen stationed around the world.

Releases were sent to almost 12,000 newspapers and radio stations throughout the United States and its territories. The Norfolk-based center produced releases on personnel from six carrier battle groups, six amphibious ready groups, seven Mideast Force deployment groups, 45 commands based overseas and 40 special operations.

In addition to unit specific stories, FHTNC produced thousands of individual releases on personal awards, promotions and retirements, as well as acknowledging numerous graduations from recruit training, service schools and civilian colleges.

The key to this achievement was the Sailors and Marines who elected to be part of this program. For information on how your command can participate in this voluntary public affairs program, call DSN 564-2221/4346 or (757) 444-2221/4346. E-mail can be sent to dlee@fhtnc.spear.navy.mil. ⚓



Houses in the Nimitz Hill housing area near Naval Station Marianas, Guam, sit crumpled by super typhoon *Paka*. The typhoon hit the island with sustained winds of 175 mph.

Seabees assist Typhoon Paka victims

PORT HUENEME, Calif. — Super-typhoon *Paka* roared across the island of Guam, Dec. 16, unleashing torrential rains and record wind gusts up to 190 mph. The storm damaged or destroyed about half the homes on the island.

In response, several commands from Construction Battalion Center (CBC), Port Hueneme, Calif., teamed up to load two C-5 aircraft headed for the island with needed equipment such as generators and flatbed trailers.

Seabee commands participating in the humanitarian effort were — 31st Naval Construction Regiment, construction mechanics and equipment operators from Naval Mobile Construction Battalions 3 and 4, technicians from Mobile Utilities Support Equipment Department and CBC's Construction Equipment Department. ⚓





▲ Seabees stationed at Construction Battalion Center, Port Hueneme, Calif., load equipment aboard a C-5 aircraft headed for Guam in support of humanitarian efforts on the typhoon-devastated island.

◀ In the aftermath of super typhoon *Paka*, five-year-old Stephanie Naystatt, plays her part in humanitarian relief efforts by using her wagon to transport potable water.

MCPON suggests Sailors read naval history

WASHINGTON — Master Chief Petty Officer of the Navy Master Chief Electronics Technician (SW) John Hagan strongly recommends Sailors read about naval history. History books give Sailors an insight into the experiences of their predecessors and help develop character.

Hagan said that honor, courage, commitment, dedication, integrity, discipline loyalty have not changed in the U.S. Navy's 222-year history. "We realize we have a proud heritage only because those values prevailed in our past," said Hagan. "We have a great deal to learn from the way Sailors of the past displayed today's Core Values of Honor, Courage and Commitment, and lived up to their obligation."

Ship and station libraries carry many of the books on MCPON's reading list. Here is just a sample of the hundreds of books available on naval history:

1) *We Will Stand By You - Serving in the Pawnee, 1942-1945* by Theodore C. Mason

2) *Crossing the Line: A Bluejacket's World War II Odyssey* by Alvin Kernan

3) *Brave Ship, Brave Men* by Arnold S. Lott

4) *Proudly We Served: The Men of USS Mason* by Mary Pat Kelly

5) *Good Night, Officially* by William M McBride

6) *Blood on the Sea* by Robert Sinclair Parkin

7) *The Last Patrol* by Harry Holmes

8) *The Ship That Held The Line* by Lisle A. Rose ⚓

30,000 Sailors, Marines train in JTFEX 98-1

NORFOLK — The USS *John C. Stennis* (CVN 74) Carrier Battle Group (CVBG), with embarked Carrier Air Wing 7, and the USS *Wasp* (LHD 1) Amphibious Ready Group (ARG), with embarked 26th Marine Expeditionary Unit, recently completed Joint Task Force Exercise (JTFEX) 98-1.



Photo by PH3 Ken Pace

A Landing Craft Air Cushion (LCAC) transports Marines from the 26th MEU and its equipment on board the amphibious assault ship USS *Wasp* (LHD 1) during the onload phase of JTFEX 98-1.

The three-week exercise included participation by more than 30,000 service members from all branches of the Armed Forces and provided quality, realistic, intensive training to fully prepare U.S. forces for joint operations. JTFEX 98-1 featured the latest advances in technology and demonstrated a wide range of capabilities that may be needed in various geographic areas where forces serve on deployment.

Ships and submarines of *John C. Stennis*'s CVBG participating in JTFEX 98-1 included USS *Monterey* (CG 61), USS *San Jacinto* (CG 56), USS *Cole* (DDG 67), USS *Laboon* (DDG 58), USS *Caron* (DD 970), USS *Santa Barbara* (AE 28), USS *Providence* (SSN 719) and USS *Minneapolis-St. Paul* (SSN 708). Ships of the *Wasp* ARG included USS *Trenton* (LPD 14) and USS *Portland* (LSD 37). ⚓

Around the Fleet

Singapore to open to larger Navy ships in the future

SINGAPORE — The United States and Singapore announced a new agreement for U.S. aircraft carriers, submarines and other warships to use a planned $35 million naval base in Singapore for port visits and maintenance beginning in the year 2000.

The announcement at a joint press conference drew praise from visiting U.S. Defense Secretary William Cohen, who called it further evidence of the desire by both countries for the American military to help maintain security in the Asia-Pacific region.

Cruisers and smaller U.S. Navy ships already use limited facilities in Singapore for port calls, but giant aircraft carriers are forced to anchor offshore and cannot dock at this strategically located city-state between the South China Sea and the Strait of Malacca.

"I think it sends a very strong signal once again for the long-term security relationship in this region," said Cohen. ⚓



As part of shipboard team training, Sailors assigned to the aircraft carrier USS *Independence* (CV 62) conduct realistic firefighting techniques on a mock jet.

Sailors learn teamwork is key to survival

PENSACOLA — Choking smoke, burning jet fuel, hot ordnance, flames leaping into the air licking the sky ... it's all in a day's training at Aviation Boatswain's Mate Aircraft Handler School located at the Naval Air Technical Training Center (NATTC), NAS Pensacola, Fla.

Three courses are taught at the center: Basic "A" school, Advanced "C" school for E-5s and above, and Aircraft Firefighting Shipboard Team Trainer course.

Each successive course builds upon previously learned techniques and concepts to bring Sailors to a more complete understanding of what it takes to battle one of the worst nightmares for any Sailor — fire aboard ship — and win.

The shipboard team trainer is where this firefighting training is put to the ultimate test as personnel from all types of ships come together to learn how to combat all type of fire in a real-life training environment.

"The course is designed to take crash and salvage crews from ships and teach them concepts in firefighting," said Chief Warrant Officer Rick Dawdy.

Sailors going through the course can come from just about any rate that works on the deck of an aircraft carrier. Crews practice on a mock-up aircraft that has jet fuel pumped to it to feed the practice fires.

Personnel also learn handling and salvage techniques for moving and lifting aircraft that may land with a collapsed landing gear.

The school trains about 500 "A" and "C" school students every year. An additional 200 or so go through the shipboard team training course. ⚓

Exercise *Reliant Mermaid* ends

EASTERN MEDITERRANEAN — USS *John Rodgers* (DD 983) with Commander, Destroyer Squadron (COMDESRON) 14 embarked, recently participated in Exercise *Reliant Mermaid* near Haifa, Israel. Elements of the Turkish and Israeli navies also participated in the humanitarian search and rescue (SAR) exercise in the international waters of the Mediterranean Sea.

The scenario of the exercise simulated three sinking civilian sailboats. Helicopter Antisubmarine Squadron Light 46, Det. 6 aircraft from *John Rodgers* located the sinking vessels and directed Navy ships to the area.

"Our SAR training certainly paid off," said Operations Specialist 2nd Class Juan R. Caro, a rescue swimmer aboard *John Rodgers*. There's no question if the ship does

receive a distress call, we're ready to respond. *John Rodgers* really operated as a team."

Reliant Mermaid was the first exercise of this type by the three nations.

USS *Comstock* crew visits India

PORT BLAIR, INDIA (NWS) — USS *Comstock* (LSD 45) visited Port Blair, India in January to enhance relations between the United States and the Indian military. *Comstock* became the first U.S. Navy ship to visit Port Blair, located in the Eastern Bay of Bengal.

Comstock crew members gave tours to more than 1,000 Indian natives. For some Indians, this was the first time they had ever seen Americans.

"Being a tour guide was a great experience," said Personnelman 2nd Class Mae L. Purganan, from Bellview, Wash. "Everyone was enthusiastic and attentive because they had never seen a U.S. naval warship before."

"The visit to Port Blair was thrill for the ship," said *Comstock*'s commanding officer, CDR Gregg S. Jackson. "Not only was it a unique cultural experience, but it was an opportunity to show off the United States Navy-Marine Corps team and increase understanding between the Indian and United States militaries. It was a visit that none of us will soon forget." ⚓

Duty station showcase





Halifax harbors healthy haven

HALIFAX, NOVA SCOTIA — Famous liberty port; assembly point of merchant convoys in World War II; and home of Commander Undersea Surveillance (CUS) Det., Halifax.

This little-known duty station is a once in a lifetime opportunity to enjoy one of the most beautiful and "best-kept secret" duty stations the Navy has to offer. "The Halifax area is a great place to live and raise a family," said Sonar Technician (Geographic) 1st Class William V. Carone of CUS Det. Halifax. "My children enjoy the schools and activities after school at the community centers. My wife has made many friends while living here. Working in Maritime Atlantic Command, Intelligence Division, has allowed me to expand my skills, not only as an acoustician, but as a Sailor, too" Carone added.

CUS Det. Halifax is part of "Trinity," the Canadian Forces Integrated Undersea Surveillance System (IUSS) Center, established in 1995 to take on the responsibilities once assigned to Naval Facility Argentia, Newfoundland, and Canadian Forces Station Shelbourne, Nova Scotia. Since the base closings in Argentia and Shelbourne, a small Navy detachment of approximately 30 enlisted personnel and officers has played an integral role in supporting joint Canadian/U.S. undersea surveillance.

Live musicians are a common site on the Halifax waterfront during the summer.

According to CUS Det. Officer In Charge LCDR Selena Hernandez-Haines, "Traditionally, most overseas IUSS commands were in places like Keflavik, Iceland, and on Midway Island. To be situated downtown in a city that is the cultural center of the region is a wonderful change."

Though a small part of the crew at Trinity, the U.S. Navy detachment will continue to provide dedicated IUSS support to both Canadian and U.S. fleets. And they will definitely continue to enjoy the beautiful and vibrant city of Halifax, Nova Scotia. ⚓

Charthouse



BUPERS emphasizes need for family care plans

All Navy personnel on active duty or in the Ready Reserve who have a military spouse or who are single parents are required to have a current family care certificate on file with their command.

Recently, BUPERS reiterated this policy in NAVADMIN 296/97, emphasizing the need for service members to have a detailed plan to ensure they can fulfill military duties, including deployment, normal and extended work hours, temporary additional duty assignment (TAD), weekend duty, etc. The Navy Family Care Plan can be found in OPNAVINST 1740.4A.

Service members must submit a new or updated family care plan when reporting to a new duty station or when they have a change in caregiver circumstances or in personal or family circumstances (birth or adoption of a child, assuming sole care for an elderly or disabled family member, etc.). Commands must verify the plans when they are received prior to reenlistment or extension of obligated service, and prior to the service member moving under permanent change of station (PCS) orders.

BUPERS point of contact is LCDR Jim Hogan at DSN 224-6862 or (703) 614-6862. (BUPERS)

Qualified Sailors needed for Linguist rating

Sailors who are proficient in a foreign language have the opportunity to become Navy linguists.



The Cryptologic Technician (Interpretive) (CTI), rating, offers excellent advancement opportunity: E-4 at 100 percent, E-5 at 32 percent and E-6 at 34 percent on the last exam cycle; the rating is in Career Reenlistment Objectives (CREO) Group 1. Other benefits include Selective Reenlistment Bonus (SRB) Zone A levels up to 5.5 (depending on language), and special language proficiency pay, as discussed in NAVADMIN 293/97.

BUPERS is specifically looking for Sailors, E-2 through E-5, who can speak proficiently (native or near native), read, and/or write Spanish, French, Arabic, Persian-Farsi, Chinese (Mandarin), Korean, Vietnamese, Cambodian, Serbian, Croatian and Russian.

Sailors who are accepted for conversion to CTI will receive up to 63 weeks of foreign language training at the Defense Language Institute in Monterey, Calif., with follow- on technical training at Goodfellow AFB, Texas.

NAVADMIN 293/97 contains specific information on entry and test score requirements. Interested Sailors can contact CDR Perlberg at DSN 225-3380 or (703) 695-3380, or CTICS Harris at DSN 225-6363 or (703) 695-6363. (BUPERS)

SECNAV, OPNAV instructions and notices now available on CD-ROM, Internet

Unclassified SECNAV and OPNAV instructions and notices are now available for Sailors on CD-ROM in a collection of five disks. They're also available on the Internet at <www.dodssp.daps.mil/usndirs.htm> in Portable Document Format (pdf) with an easy-to-install Acrobat Reader package included.



The entire system, both CD-ROM and Internet, is called the Navy Electronic Directives System (NEDS). NEDS will increase availability and improve delivery of the directives. Since the web site is updated weekly and the CD is updated quarterly, the task of maintaining binders, entering changes and keeping directive libraries up-to-date will be eliminated, saving valuable time and space.

"I can research things in a timely manner and at the same time know they [the directives] are all there," said Yeoman 1st Class (SW) Richard Kowalczyk, assigned to the Navy and Marine Corps Center in Wilmington, Del.

All Navy activities listed on the Standard Navy Distribution List will receive a set of the CD-ROMs quarterly. If more than one set is needed, an order may be placed for a minimal cost with the Defense Automated Printing Service Office in Philadelphia. Ordering information and forms are available on the web and on the CDs. (Navy Wire Service) ⚓



Navy-Marine Corps Relief Society assumes Red Cross financial help to Sailors



When Sailors, Marines and their eligible family members go to the American Red Cross for financial assistance, the funds will now come from the Navy-Marine Corps Relief Society (NMCRS).

Effective Jan. 1, the Red Cross discontinued direct funding of financial assistance to service members and their families. However, Red Cross emergency communications services and disaster relief support remain unaffected by the change.

The nearest NMCRS office should continue to be the first stop for Sailors, Marines and their eligible family members in need of financial help. If a need arises and a shipboard or shore NMCRS office worldwide cannot be contacted, the nearest Red Cross office should be reached. (Navy/Marine Corps Relief Society) ⚓

Shipmates



Aviation Warfare Systems Operator 1st Class (Aviation Warfare) Steven Winter stationed at Helicopter Antisubmarine Squadron Light 41, was named the squadron's Aircrew Instructor of the Year for 1997. The Circleville, Ohio, native was selected for this honor by his fellow instructors after demonstrating imaginative teaching techniques, dynamic leadership and outstanding professionalism.



Scott Miserendino, an employee of the Military Sealift Command, was selected to receive a Copernicus Award by the Armed Forces Communication and Electronics Association and the U.S. Naval Institute. Miserendino headed a project allowing MSC ships to receive messages on desktop computers instead of through satellite connections. The cost saving is approximately $3 million a year.



Hospital Corpsman 1st Class Constance Zeno was named Selected Reserve Sailor of the Quarter, for Naval Reserve Medical/Dental 0276, Point Mugu, Calif. The Ridgecrest, Calif., resident was chosen for her hands-on leadership to accuracy as the unit's acting leading chief petty officer. Additionally, under her direction and guidance, the unit received invaluable training during their recent annual training.



Yeoman 1st Class (SW/AW) Daniel D. Burke was recently selected as the FY97 Recruiter Support Person of the Year for Navy Recruiting Command. Burke, a native of Blue Springs, Mo., is assigned to Navy Recruiting District, Kansas City. Aside from his everyday administrative work and career counselor responsibilities, Burke also provided dozens of referrals for recruiters throughout the district.



Aviation Ordnanceman 1st Class (Aviation Warfare) Wiley Lee Portis was selected Naval Air Station Pensacola's 1997 Sailor of the Year. Portis was recognized as the command crime prevention coordinator. He also performed the duties of career counselor, small arms instructor/range and safety officer, disaster preparedness officer and physical readiness coordinator.



Your shipmate's face could be here! Does your command have a Sailor, civilian employee or family member whose accomplishments deserve recognition? Send a short write-up and full-face color print or slide to: *All Hands* magazine, Naval Media Center, Publishing Division, NAVSTA Anacostia, Bldg. 168, 2701 S. Capitol St., S.W., Washington, D.C. 20373-5819.

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Any Day in the Navy 1998

Any day of the week May 4-10 is a typical day in the Navy. That's why it's so important to us.

Wanted are quality photographs that capture Sailors, Marines, Navy civilians, Naval Reservists and family members performing daily tasks, interacting with each other and/or otherwise contributing to mission accomplishment. The shoot has been extended to encompass an entire week to allow commands more flexibility. Selected photos will be published in the October 1998 issue of *All Hands*.

Photographs taken should reflect the diversity of both people and capabilities in the U.S. Navy and must be shot during the week of Monday, May 4 through Sunday, May 10, 1998. Photos depicting safety or uniform violations will not be considered. The best shots tend to be candid and unrehearsed, displaying the imagination and creativity of the photographer.

Submissions must include full credit and cutline information, including: full name, rank, duty station and phone number of the photographer; the names and hometowns of identifiable people in the photos; details on what's happening and where the photos were taken. Captions must be attached individually to each photo or each slide.

Photos must be processed and received (not postmarked) by *All Hands* by May 30, 1998. Photos will not be returned. Submit processed and mounted color slides, or quality color prints, either 5X7 or 8X10. Digital images will also be accepted. Just mail a zip disk containing the high resolution JPEG images with cutlines and photo credits embedded. Zip disks will not be returned. You may also download high resolution JPEG images directly to the News Photo Division of CHINFO by dialing (703) 521-1370 or (703) 521-1713. Mark all images as "Any Day Submissions."

Mail submissions to: Naval Media Center, Publishing Division, ATTN: *All Hands*, Photo Editor, NAVSTA Anacostia, Bldg. 168, 2701 S. Capitol St., S.W., Washington, D.C. 20373-5819.

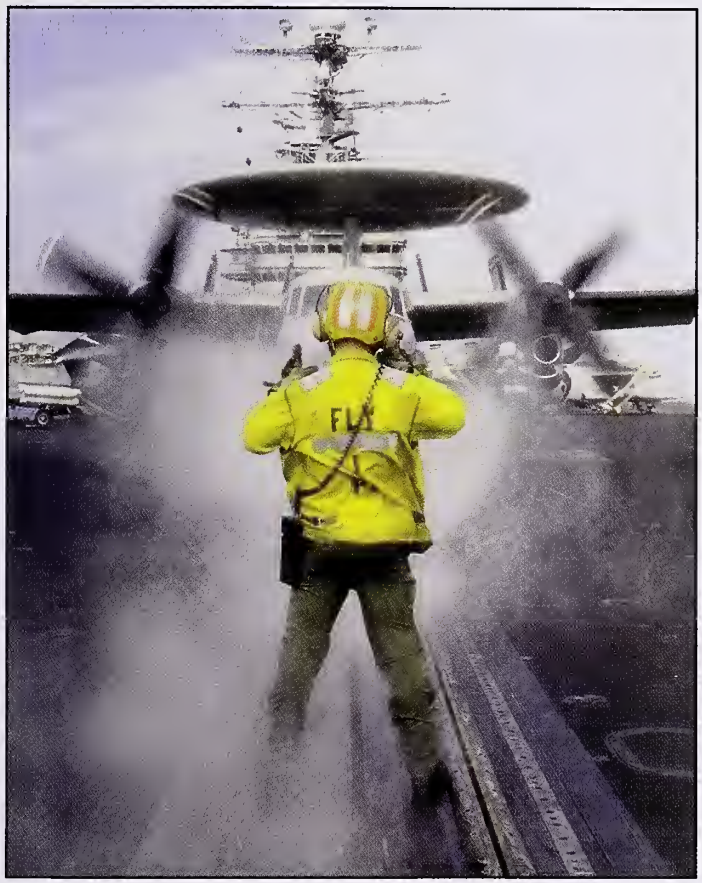


Photo by PH2 James Watson

Photocopy this form and attach a completed copy to each photo you submit.

Photographer:

Full name: _____

Rank: _____

Duty station (including mailing address and phone number): _____

_____

_____

Photograph:

Where photograph was shot: _____

Caption (what the photo depicts): _____

_____

_____

People in the photo (include first and last names, ranks/ratings, warfare designators and hometowns):

_____

_____



Photos by PH1(AW) Don Bray



NAME: **HM1 Dawn G. Walker**

ASSIGNED TO: **Naval Submarine Training Center, Pacific**

HOMETOWN: **Cleveland**

HOBBIES: **Hiking, listening to music**

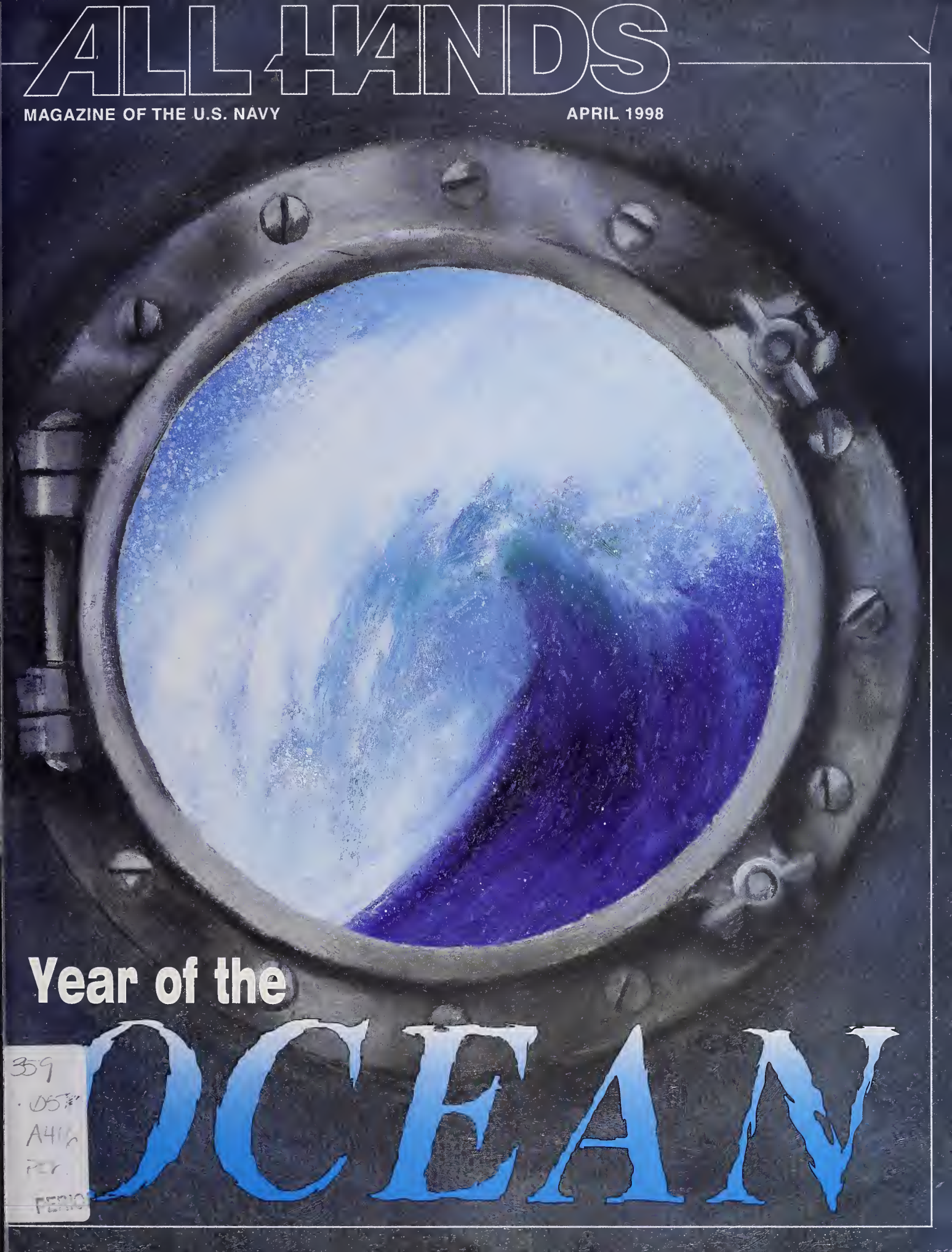
BEST PART OF THE JOB: **"Enjoying the work that I do and providing an invaluable service to the submarine community."**

KEYS TO SUCCESS: **"Maintaining a positive attitude, setting high standards."**

ALL HANDS

MAGAZINE OF THE U.S. NAVY

APRIL 1998



Year of the OCEAN

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ALL HANDS
April
Number 972

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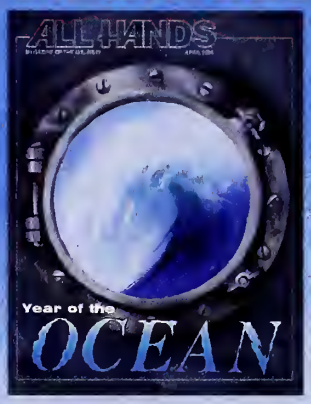
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The ocean's resources are finite. Each of us has a responsibility to manage these vital resources wisely and carefully so future generations can use and enjoy them. You have the power. You can make a difference. Art by DMSN Michael Noeth

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ALL HANDS

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Check us out at ...

http://www.mediacen.navy.mil/pubs/allhands/

The Navy:



Monterey Bay Aquarium



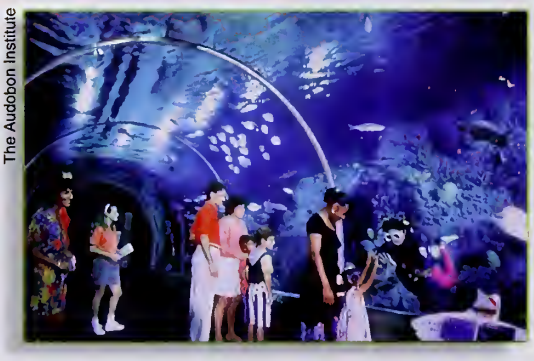
Monterey Bay Aquarium



Monterey Bay Aquarium



Monterey Bay Aquarium

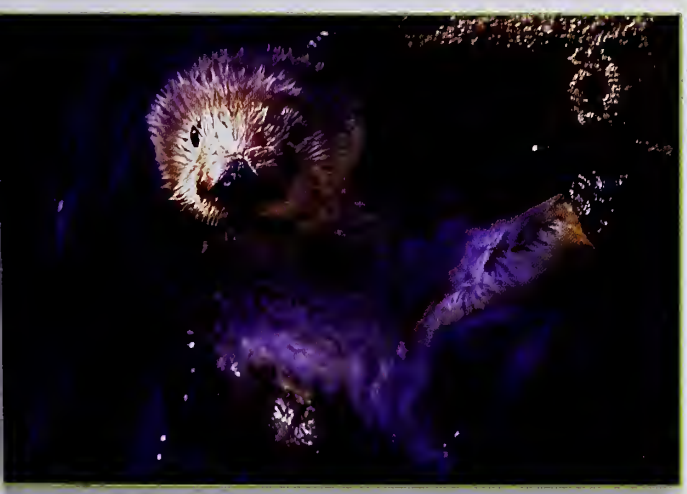


The Audobon Institute

Year of the Ocean



Monterey Bay Aquarium



Monterey Bay Aquarium



"For 222 years, Americans have used the world's oceans as a vehicle for supporting peace and security in the world. That's where the Navy-Marine Corps Team spends its time. Our Sailors and Marines have a very healthy appreciation of the oceans, but we all must become aware of just how precious the oceans are to us.

The Navy-Marine Corps team has shown true global leadership in pollution prevention, waste management, national and international regulations, and conducting ourselves as good stewards of the environment and our oceans. We continue to find new ways to use today's technology to protect our oceans.

Our oceans are a precious resource that we must constantly strive to preserve.

I want to reemphasize my own commitment to the Year of the Ocean.

The Navy-Marine Corps Team recognizes that the ocean is where we do our business, where we train and where we ensure that we are ready. We can do no less than take good care of 'our' oceans!"

—Secretary of the Navy John H. Dalton

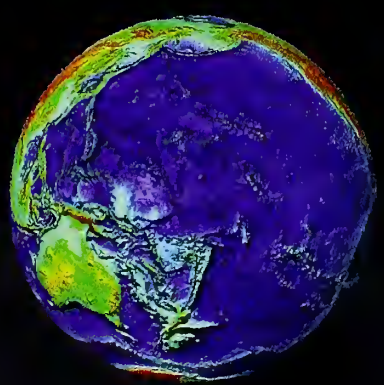
oceans 101

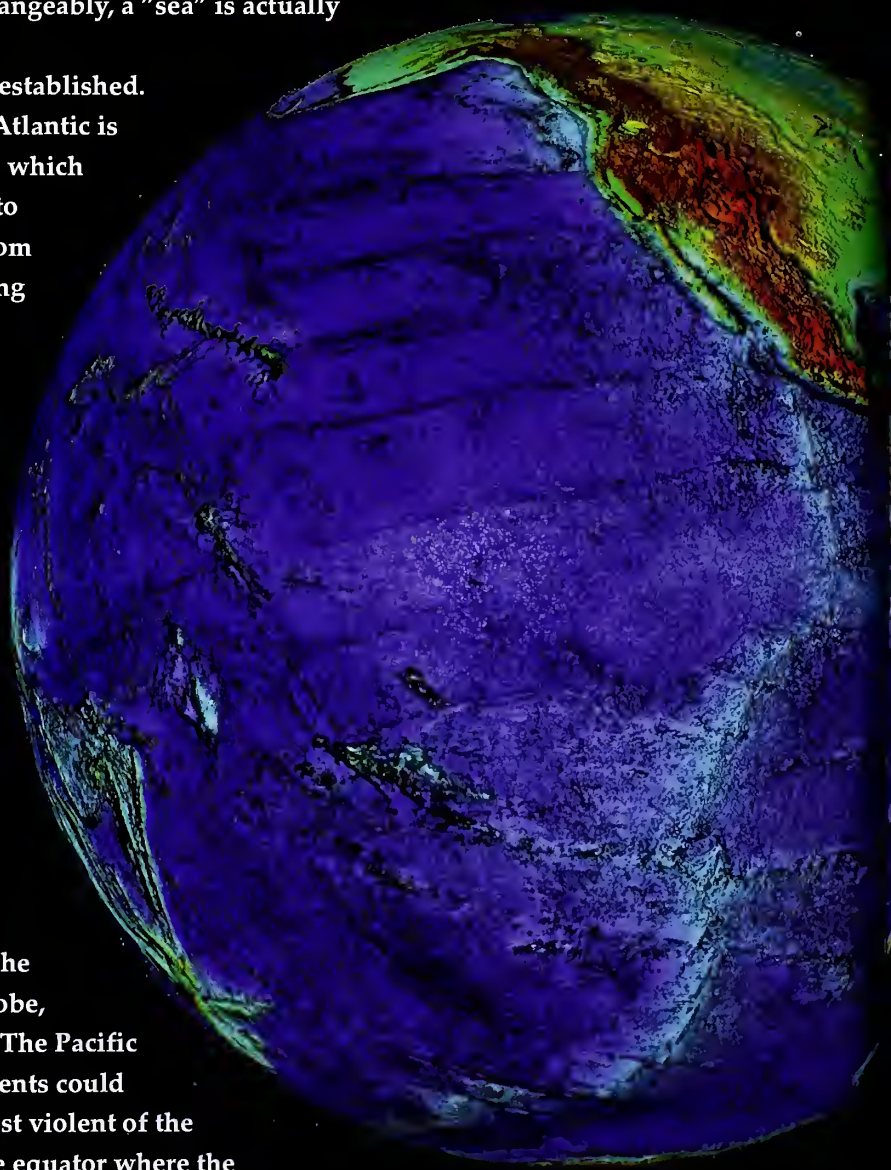
Our oceans are the source of infinite energy, splendid beauty and unparalleled mystery. Although much is known about this world beneath the waves, so much more is still waiting to be discovered. With more than 70 percent of the world's surface covered by water, the Earth's oceans remain an immense frontier for exploration. For more than 200 years, the U.S. Navy has sailed these oceans in defense of freedom. Every Sailor should understand this incredibly vast, sometimes fragile and always remarkable marine environment.

The Four Oceans

The four oceans of the world are the Atlantic, Pacific, Indian and Arctic. While "ocean" and "sea" are often used interchangeably, a "sea" is actually a subdivision of an ocean. There are 54 seas.

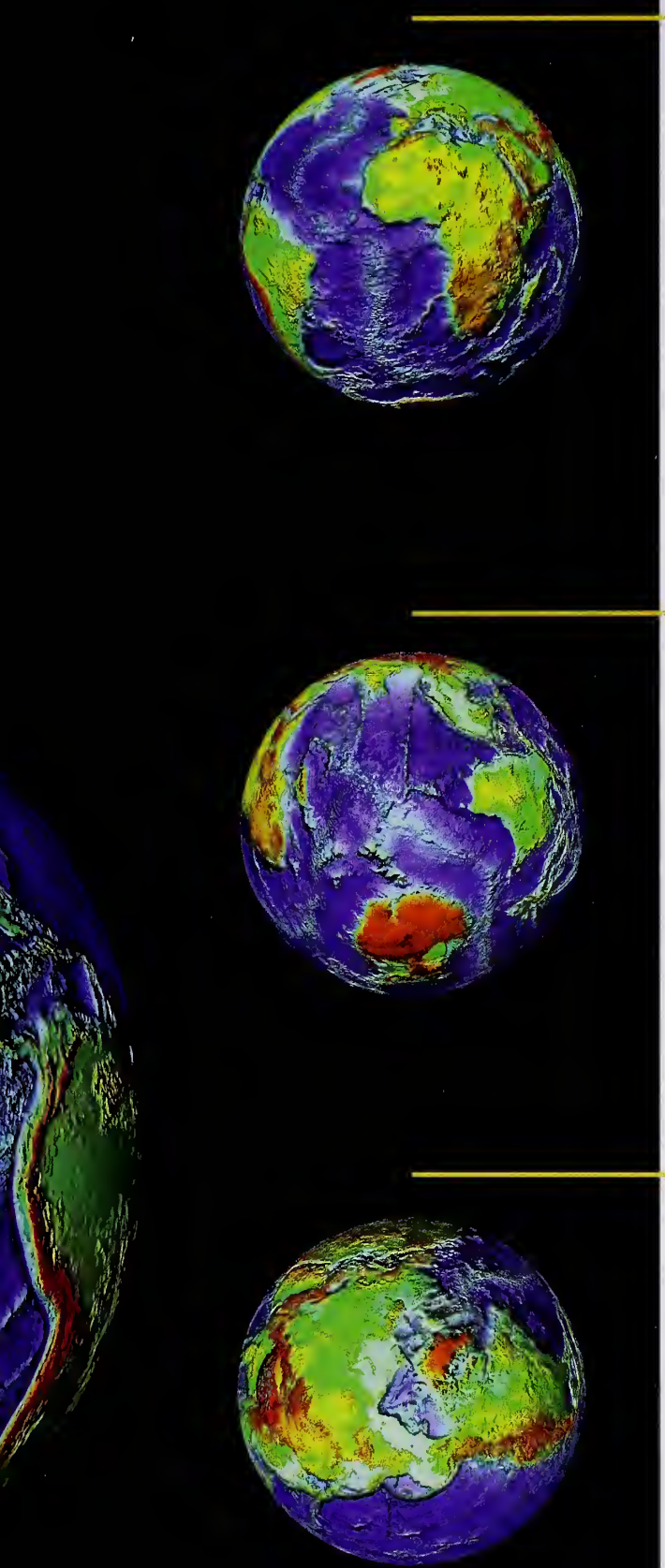
Boundaries between oceans were arbitrarily established. For example, in the Southern Hemisphere, the Atlantic is separated from the Pacific by an imaginary line which extends from Cape Horn across Drake Passage to Antarctica. Similarly, the Pacific is separated from the Indian Ocean by a string of islands extending from the Strait of Malacca to Australia, and southward from Tasmania to Antarctica.





Pacific Ocean

The Pacific is by far the largest and deepest of the four oceans. It covers nearly one-third of the globe, an area approximately 64 million square miles. The Pacific Ocean is so immense that all the world's continents could be put into it with room to spare. Likely the most violent of the oceans, the Pacific is home to typhoons near the equator where the ocean measures nearly 11,000 miles wide. It is also home to more than 300 active volcanoes and periodic tidal waves. The Pacific has an average depth of 13,000 feet.



Atlantic Ocean

The hourglass-shaped Atlantic covers approximately 20 percent of the Earth's surface and is the second largest of the four oceans. It extends from the North Pole southward for 10,000 miles to the Antarctic continent, and covers 41 million square miles. More is known about the Atlantic because of the heavy commercial and military ship traffic connecting Europe and North America. The Atlantic's average depth is 12,000 feet and the greatest depth is 28,374 feet in the Puerto Rico Trench. If Alaska's Mount McKinley (20,320 feet) was to rise from the floor of the Puerto Rico trench, its peak would still be about 1.5 miles below the surface of the Atlantic.

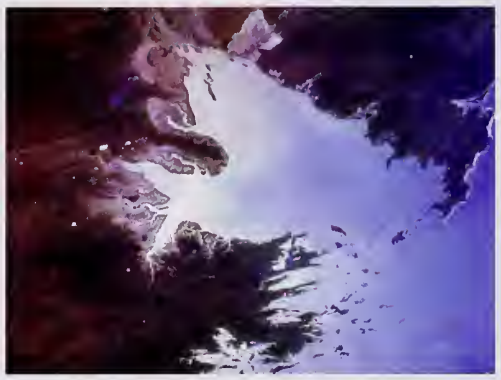
Indian Ocean

The Indian Ocean is often incorrectly thought of as a tropical ocean. Check your map! It stretches southward to Antarctica. It is triangular and bordered by Africa, Asia, Antarctica and Australia. Although it covers about 28.5 million square miles, it is smaller than the Atlantic and less than half the size of the Pacific Ocean. The Indian Ocean contains only 20 percent of the Earth's water surface, but many island nations are found within its boundaries - Madagascar, which is the world's fourth largest island, the Seychelles, Maldives, Mauritius and Sri Lanka.

Arctic Ocean

Centered approximately on the North Pole, it is the smallest of the world's oceans, covering about four and a half square miles. This ocean's maximum depth is 18,050 feet. The ocean is divided into two nearly equal basins: The Eurasia and the Amerasia. The Lomonosov Ridge, which extends from northeastern Greenland to Central Siberia, separates the basins. The Arctic Ocean is surrounded by the land masses of Eurasia, North America and Greenland, and is unlike the other three oceans because of its perennial ice cover. The extent of ice cover is seasonal between 60N and 75N latitude, but above 75N it is relatively permanent. Ice cover reduces energy exchange with the atmosphere which results in reduced precipitation and cold temperatures.

Seawater vs. Freshwater



Only 3 percent of the Earth's water is fresh, the rest is salty. Two-thirds of the Earth's fresh water supply is frozen solid in ice caps and glaciers. The remaining 1 percent is found in clouds, precipitation (rain and snow), rivers, lakes and ground water. Seawater, or saltwater, is a complex solution made up of trace amounts of nearly 60 different chemical elements, including gold. In fact, if all the gold in the world's oceans could be mined there would be enough to supply every person on Earth with nine pounds each. But, common salt is the most abundant ingredient, making up approximately 78 percent of the total dissolved solids in seawater. It has been calculated that if all the oceans of the world would dry up, 4.4 million cubic miles of salt would remain. That's enough salt to cover all land on the planet to a depth of 150 feet.





Seawater Salinity

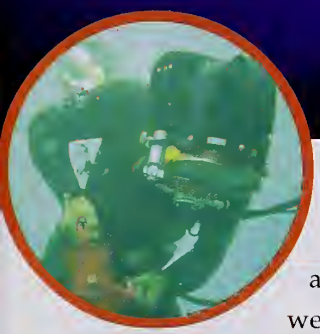
The first thing that comes to mind about seawater is that it is salty. Salt content, or salinity, is the total amount of dissolved solids contained in one kilogram of seawater. In that there are 1,000 grams in a kilogram, salinity is numerically expressed in parts per thousand (ppt). Salinity in the oceans varies from about 32 to 37 ppt except in the polar regions and near shore where it may be less than 30 ppt. The average salinity of the world's oceans is 35 ppt, which is the same as 35 grams of salt in each kilogram of water.

Icebergs

Glaciers create icebergs when large chunks of the glacier break off (calving) and begin to drift. Approximately 7,500 icebergs are formed during this process each year. Portions of an iceberg may have hues of blue or green, depending upon the age of the ice. Blue ice is "old," while green ice, which contains algae, is considered "new." Glaciers on the west coast of Greenland produce most of the icebergs found in the Northern Hemisphere. Icebergs vary in size, but are typically irregular with pinnacles. About seven-eighths of an iceberg is submerged. Thus, iceberg drift is affected more by ocean currents than by wind. When they drift into shipping lanes, they become a serious hazard.



All seven species of barracuda live in American waters. The great barracuda, often called "the tiger of the seas" feeds on other fish but will attack people.



Seawater Pressure

A major problem with working at great depths is the tremendous weight of water. Oceans, like the atmosphere, exert pressure on the surface upon which they rest. For example, a 1-inch by 1-inch column of atmosphere resting the Earth's surface weighs approximately 15 pounds (actually 14.7). This number, when used in calculations, is referred to as "one atmosphere" or 14.7 pounds per square inch. Pressure in the ocean increases one atmosphere with about every 33 feet of depth. For example, at a depth of 99 feet, the absolute pressure would be about four atmospheres, or four times greater than on the surface. In the Puerto Rico Trench mentioned earlier (28,374 feet deep), pressure would be more than 12,642 pounds per square inch or the equivalent of about 860 atmospheres.



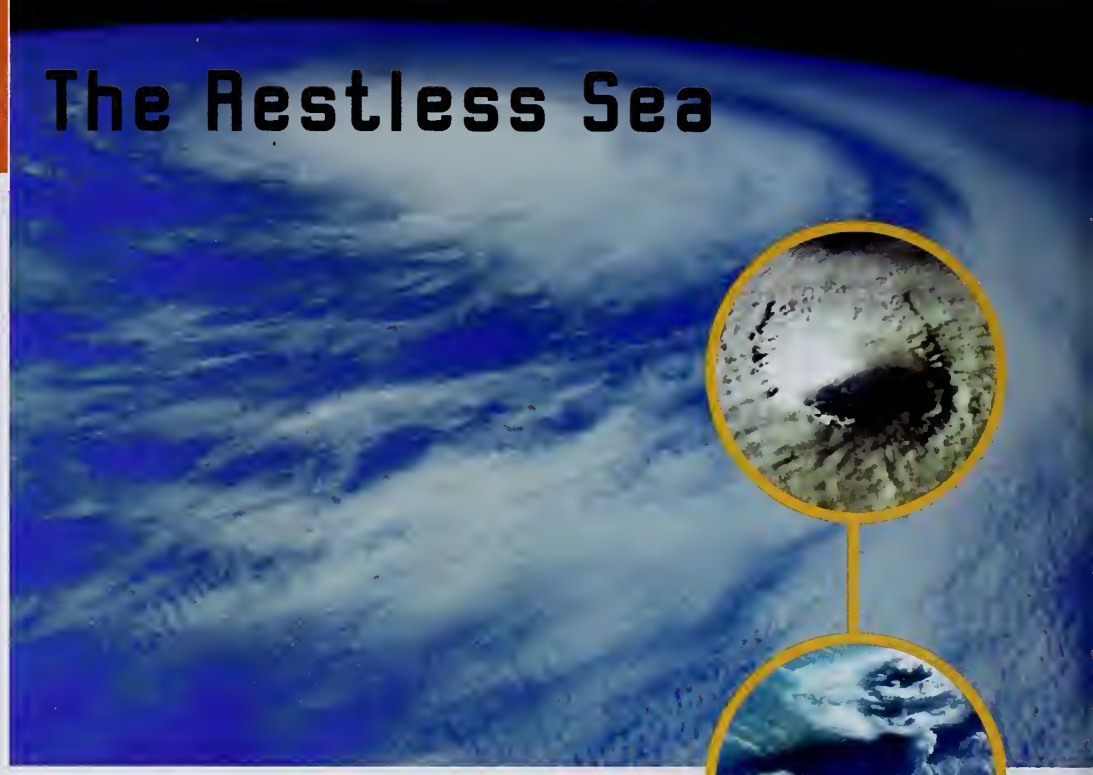
A hyperbaric chamber can keep divers from getting the bends.



Underwater Sound

Light and radio waves are highly absorbed by the oceans, but sound waves are not. This is why sound waves are used to probe and measure the oceans' depth, evaluate bottom sediment thickness and communicate underwater. The speed that sound travels underwater varies from about 4,750 to 5,150 feet per second. It increases with temperature at a rate of about 7 feet per second per degree Fahrenheit; it increases with salinity at about 4 feet per second per 1 ppt increase in salinity; and it increases 1 foot per second for every 60 feet of depth.

The Restless Sea

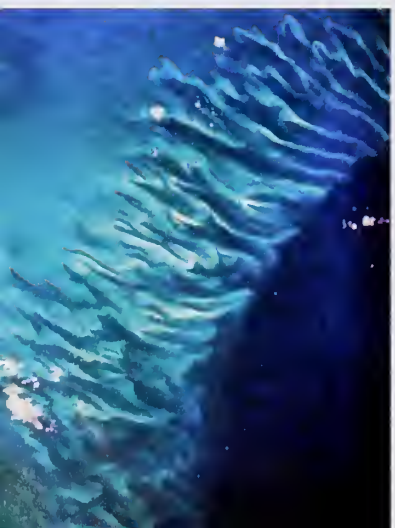


The sun's energy drives the oceans' circulation patterns. Rising warm air, sinking cold air and uneven heating of the Earth's surface create wind, which is the major force behind all horizontal surface currents. Other forces also effect the movement of the sea. The gravitational pull of the sun and moon, for example, has a particularly profound influence on coastal waters where tidal ranges are large. Whatever force is driving the movement, the bottom line is that the ocean is in constant motion.



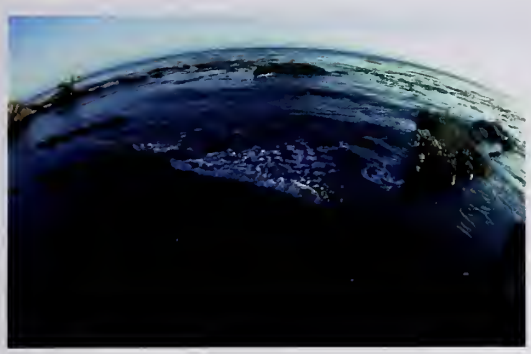
Currents

Currents are persistent global water motions that transport large volumes of surface and subsurface water across vast distances. They may be horizontal or vertical, depending on the forcing mechanism. Horizontal surface currents are propelled by the frictional force of wind dragging the water. Because the wind directly influences currents in the surface-layer circulations of the ocean, there is a relationship between oceanic circulation and the general circulation of the atmosphere. For example, in the Northern Hemisphere oceanic circulation is clockwise and in the Southern Hemisphere it is counterclockwise. There are also subsurface currents involving the flow of deep ocean water, a process called thermohaline circulation, which arise from differences in density in seawater. These sea-surface and deep-ocean currents keep the oceans in constant motion.



Longshore Currents

Longshore currents can be found on most beaches, but their strength is seasonally variable (stronger in winter). They form when waves strike a beach at an angle. As the wave front enters shallow water, the leading edge of the wave hits the shallow water sooner than the rest of the wave front and slows down, bending the wave as it moves ashore. The shoreward movement of the wave thus forms a current whose net flow is parallel to the shore in the surf zone. The speed of the longshore current increases as the waves get larger and strike the beach with less frequency at a greater angle. The slope of the beach can also affect this current. Once established, the current moves at a speed of about one knot in the same direction as the advancing wave train. Longshore currents are more prevalent along lengthy straight coastlines. Sandbars often form in areas where longshore currents frequently occur.





Rip Currents

Longshore currents can also give rise to rip currents, often called "rip tides." Rip currents are formed when longshore currents, moving parallel to the coastline, are deflected seaward by bottom irregularities, or meet another current deflecting the flow seaward. Development depends upon wave conditions. Large incoming waves on a long, straight beach will produce "rips."



A boat is left high and dry during low tide.

Tides

Tides are the slow, periodic rise and fall of the sea surface. They are usually described as being either diurnal or semi-diurnal. Diurnal tides have one high water and one low water in each lunar day (about 24.8 hours), while semi-diurnal tides have two highs and two lows. While these tidal changes are easier to observe where land and water meet, they exist everywhere - even in the middle of the ocean! Tidal ranges along the shoreline vary by location. For example, the tides in Canada's Bay of Fundy, an Atlantic Ocean inlet west of Nova Scotia, rise and fall as much as 50 feet, while the tidal range in Lake Superior, Mich., is measured in inches.

Tidal Currents

The rise and fall of the tide is accompanied by the horizontal flow of water called a tidal current. The usual terms used to describe the direction of this horizontal movement are ebb and flood. Ebb currents occur when tidal currents are moving away from the coast. Flood currents move toward the coast. In a semi-diurnal current, the flood and ebb each last about six hours.

Waves

Waves are created principally by wind moving over water. Although earthquakes or landslides can also initiate wave action. Friction between a water surface and moving air piles up water in ridges that become waves. Wave height depends upon wind strength, fetch (distance wind blows over water) and duration (length of time the wind blows). Small wavelets called ripples appear when a breeze of less than 2 knots blows across a smooth water surface. Whitecaps will form on an ocean or large lake when winds reach 12 to 13 knots. White foam from breaking waves begins to blow in streaks along the direction of the wind at about 30 knots.

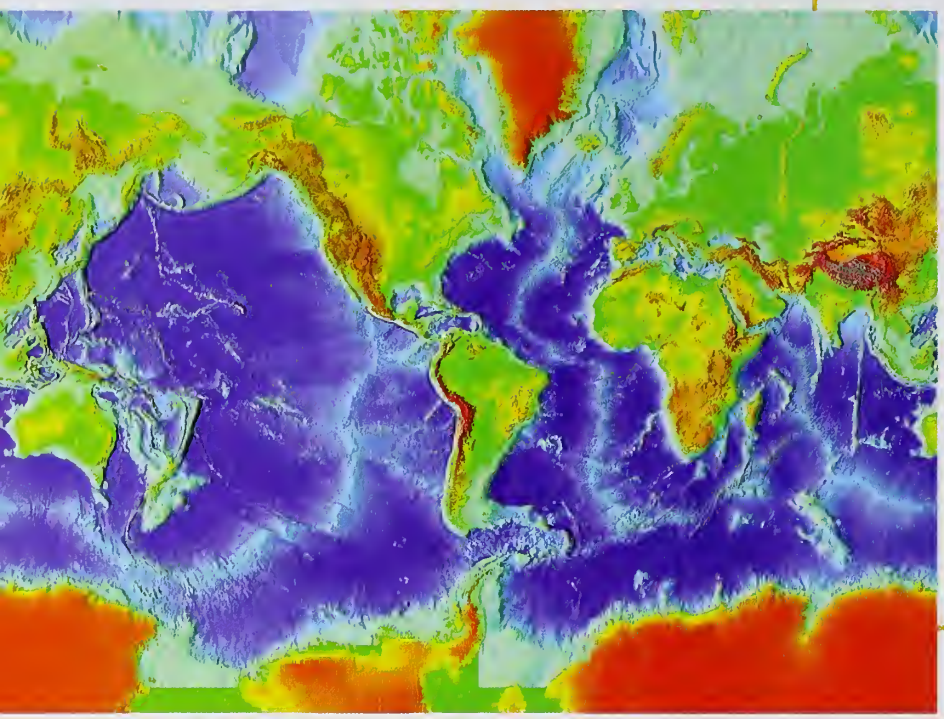
Tsunami waves

"Tsunami" is Japanese for "storm-wave." This term is used internationally to describe a series of ocean waves created by sudden, large scale submarine disturbances such as earthquakes, landslides or volcanic eruptions. The size of the wave depends on the nature and intensity of the underwater disturbance. The height and destructiveness of such a wave depends on the distance traveled from the epicenter, the topography of the ocean floor and the coastline.

A submarine earthquake, April 1, 1946, created a tsunami wave so large it encompassed the entire Pacific Ocean Basin. Traveling at an average speed of 425 knots, the wave reached the Hawaiian Islands in four hours and 34 minutes, with the tsunami cresting 50 feet above normal water level. A section of coast more than 1,000 feet wide was flooded. Some of the waves reached as far as Australia — 6,700 miles from the epicenter.



The Underwater World



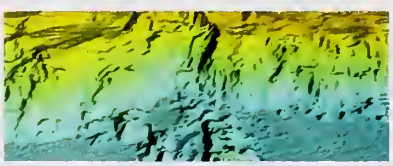
We have always known our oceans are immense. But, the introduction of the echo sounder in the early 20th century allowed us to understand just how immense. The echo sounder is a device that calculates water depth by measuring the time between the emission of a sound signal directed toward the ocean floor and the return echo. During the last 90 or so years, marine geologists and hydrographers have gathered sufficient information from echo-sounder data and bottom samples to map the ocean floor.

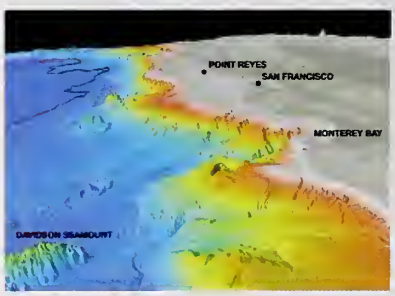
Abyssal Plains

Abyssal plains are found at the base of continental slopes, sometimes at depths greater than 9,000 feet. These plains have near freezing water temperatures and no sunlight. The Abyssal plain is regarded as the true ocean floor. The few marine inhabitants found in the region survive only because they have adapted to the hostile environment of complete darkness, bitter cold and immense pressure. Abyssal plains are among the smoothest surfaces on the planet, with less than five feet of vertical variation for every mile. These level plains are the result of a constant rain of sediments from above.

Continental Slopes and Canyons

Continental slopes rise gradually from abyssal plains but can climb by as much as 45 degrees as they approach the edge of the continental shelf. In some areas, these slopes are interrupted by broad wedges of sediment deposits called continental rises. Slopes are often gouged by deep valleys or canyons, many with the same proportions as the Grand Canyon. While most canyons were originally formed during the Ice Age, some are the result of earthquakes.

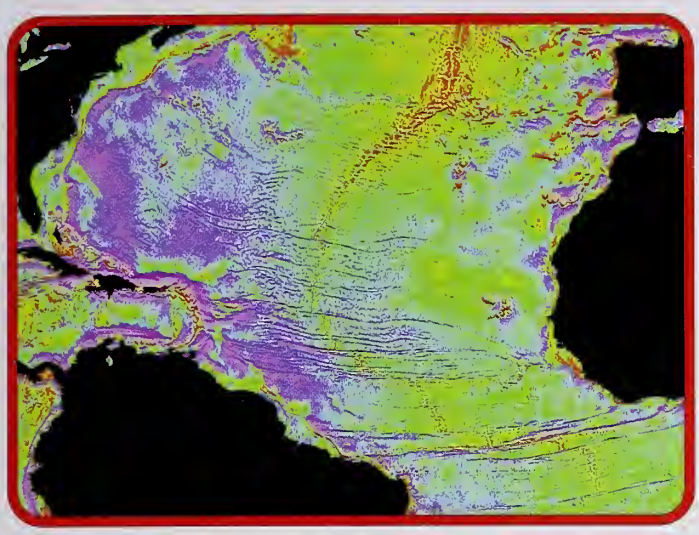




Continental Shelf

Continental shelves extend from the coastline to the edge of continental slopes. Taken together, these shelves account for about 8 percent of the sea floor area worldwide. Continental shelves are a national asset for most countries because they provide an excellent area for fishing, both commercial and sport, as well as being a resource for oil and natural gas. Shelves are not of uniform width. They vary considerably in size off the coasts of the United States alone. For example, the shelf is almost negligible along Southern California. Florida's shelf off the southeast coast is also small, especially when compared to the one extending from its west coast more than 200 miles into the Gulf of Mexico. The average width worldwide is about 40 miles.

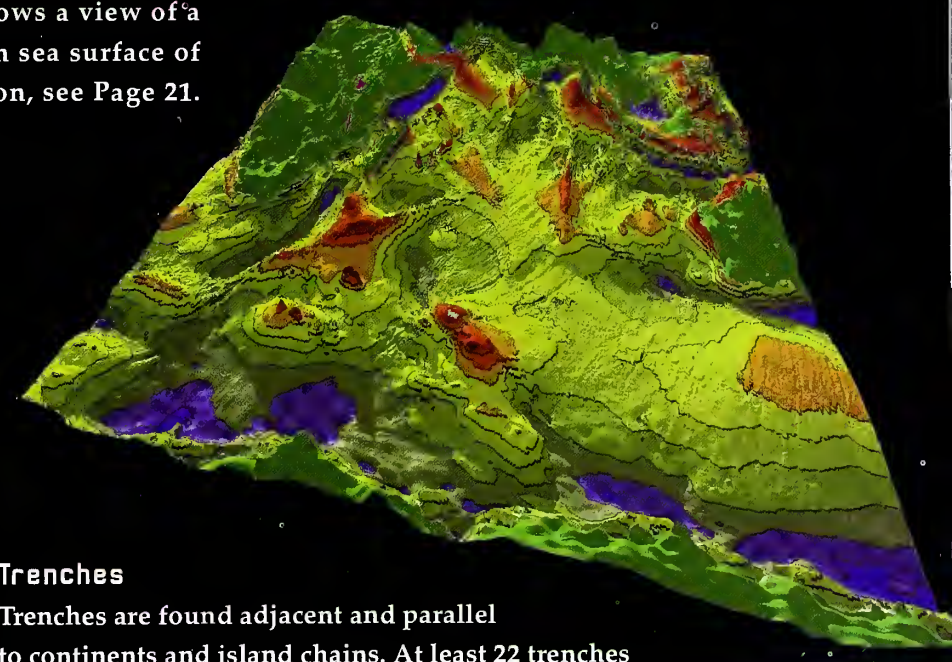




Mid-Ocean Ridges

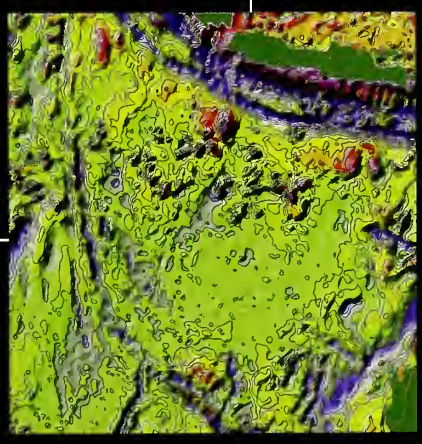
Several mid-ocean ridges are longer than the longest mountain ranges on Earth. They are also tall, with some rising to as much as 12,000 feet above the ocean floor. Often their peaks penetrate the ocean's surface to form islands, such as Iceland and the Azores in the Atlantic and the Galapagos Islands in the Pacific. Most of the ridges crest at a depth of about 8,000 feet and their widths vary from 500 to 1,500 miles. Unlike typical continental mountain ranges which have a singular pronounced line of peaks, oceanic ridges have two, separated by a prominent depression known as a rift valley. The valley ranges from 15 to 30 miles in width and cradles an active seismic belt.

This topographic image shows a view of a short wavelength part of the mean sea surface of the Indian Ocean. For more information, see Page 21.



Seamounts

Seamounts are isolated mountains rising from 3,000 to 10,000 feet above the surrounding seabed. Shaped like a cone, they have a characteristic depression similar to a crater at the summit. Samplings gathered from more than 50 seamounts around the world have led to the theory that they are of volcanic origin. Seamounts are found in all oceans, but are more numerous in the Pacific Ocean, where more than 2,000 have been identified. They are especially abundant in the Gulf of Alaska.



Trenches

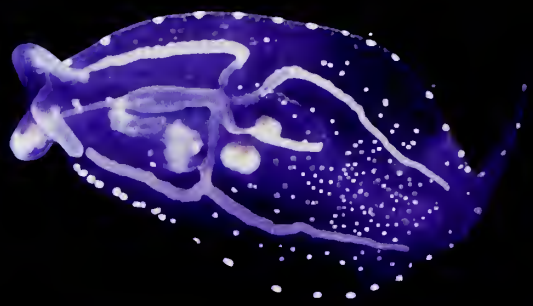
Trenches are found adjacent and parallel to continents and island chains. At least 22 trenches have been identified although not all are classified as major. Of this number, 18 are in the Pacific, three are in the Atlantic, and one (the Java Trench) is in the Indian Ocean. Depths of major trenches exceed 18,000 feet, and vary from 10 to 22 miles in width. The deepest of these is the Challenger Deep (35,810 feet) in the Marianas Trench. The depths of many trenches are greater than the elevation of the world's highest mountain. If Mount Everest (29,028 feet) were dropped into the Challenger Deep, its peak would still be almost three miles below the surface of the ocean. Trenches are not uniform in depth or width. The Peru-Chile Trench off the west coast of South America is nearly 1,100 miles long whereas the Japan Trench measures only 150 miles.

Bioluminescence

Living Light

Story and photos by Steven Haddock



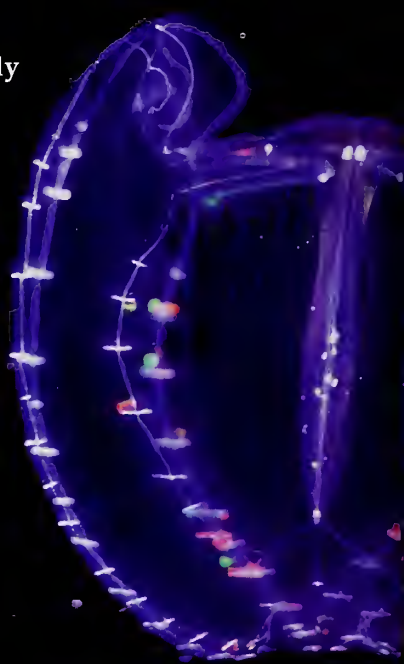


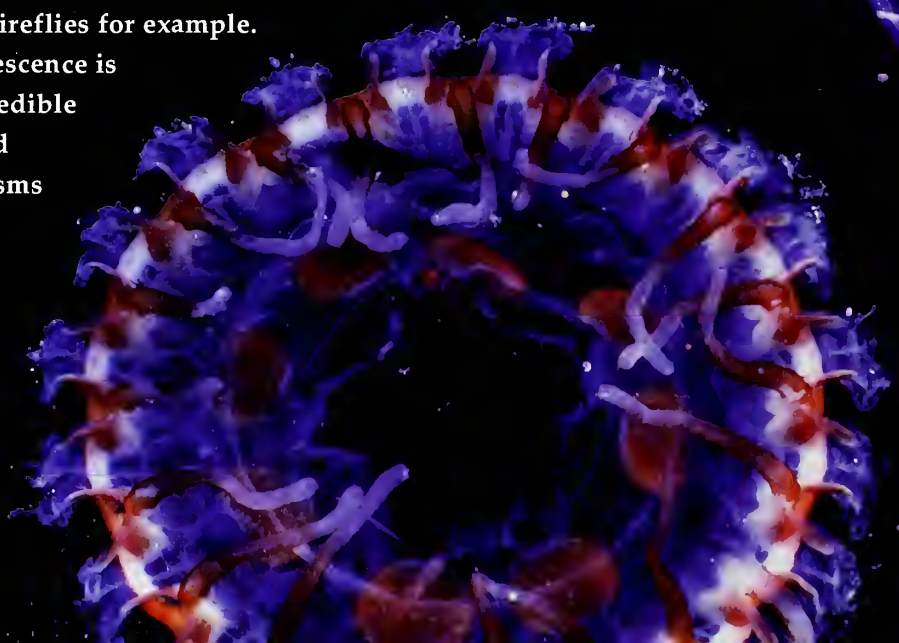
Bioluminescence is defined simply as the process wherein light is produced by a chemical reaction which originates in an organism. It can be found at anytime of the day, in any region of the world or depth of the sea. The most observable occurrence to Sailors is the often brilliantly luminescent bow wave or wake of a surface ship. In these instances, the organisms are almost always dinoflagellates, single-cell algae, numbering many hundreds per liter. When they are excited they produce light. Light production can be caused by a ship's passage or even by the movement of porpoises or smaller fish.

Bioluminescence is primarily a marine phenomenon. It is the *only* source of light in the deep ocean. In contrast, bioluminescence is essentially absent in fresh water. On land it is principally confined to members of a few families of insects, fireflies for example.

Marine bioluminescence is produced by an incredible range of bacteria and single-celled organisms to fish and squid. Some especially interesting examples are a type of squid that changes the color of its luminescence to match moonlight and sunlight, a fish with its own "night-vision" light and crustaceans that send out coded messages to their own species when its time to mate.

Bioluminescent bacteria occur nearly everywhere, and probably most spectacularly as the rare "milky sea" phenomenon. Reports of this phenomenon are abundant, particularly in the Indian Ocean where mariners report steaming for hours through a sea of glowing, soft, white light as far as the eye can see.





Myths and Fact

Myth: Bioluminescence is mostly caused by bacteria.

Fact: Bacteria can be luminous, and some organisms like fish and squid DO have bacteria in their light organs. The majority of marine life able to produce light do so with chemicals they have stored in their bodies.

Myth: Bioluminescence is the same as fluorescence, phosphorescence or chemiluminescence.

Fact: All these terms apply to the production of light from chemicals, but bioluminescence is only *similar* to chemiluminescence.

In fluorescence, the energy from an external source of light (protons) is absorbed and almost immediately re-emitted. This is how laundry detergents can get things "whiter than white," by absorbing non-visible ultraviolet light and fluorescing in the visible spectrum.

Phosphorescence is similar to fluorescence except that the excited product is more stable, so the time until the energy is released is longer, resulting in a glow after the light-source has been removed. This is the basis behind glow-in-the-dark stickers.

Chemiluminescence is a general term for production of light from a chemical reaction (as opposed to the absorption of photons, as in fluorescence and phosphorescence).

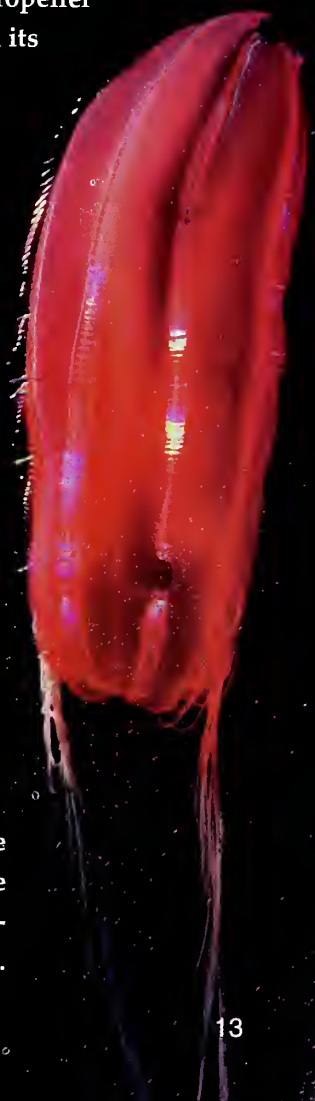
Bioluminescence is subset of chemiluminescence, where the light-producing chemical reaction occurs inside an organism.



Interesting Facts about Bioluminescence:

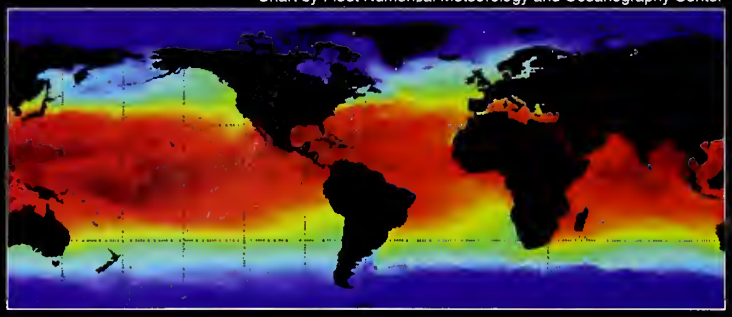
During World War I, German U-boat commanders were aware that the luminous trails created by a submarine's propeller could reveal its position and seal its fate. In fact, in November 1918, the last German U-boat sunk in the Great War was detected because of bioluminesence.

There is also documentation that carrier-based World War II aviators could easily locate their carrier after a mission by following the luminescent wake, sometimes for miles.



Haddock is a graduate student researcher at the University of California - Santa Barbara.

Chart by Fleet Numerical Meteorology and Oceanography Center



El Niño's large-scale changes of atmospheric and oceanographic conditions are now believed to influence a variety of global weather events including torrential rainfall, devastating droughts and searing heat waves. During an El Niño, westward-blowing trade winds subside and warmer water slowly moves eastward along the Equator, interrupting normal cold-water upwelling as seen in the above map. Cooler water appears blue, while warmer water looks red.

El Niño: Its Impact

Trouble...

What's With the Weather?

Story by Cathy L. Willis Naval Meteorology and Oceanography Command Public Affairs

Its name means "The Child," in Spanish, but this winter the disruption of the ocean-atmosphere system in the tropical Pacific known as El Niño/Southern Oscillation (ENSO) promises to deliver an adult-sized wallop.

Naval meteorologists and oceanographers say this could be the biggest ENSO of this century — even bigger than the 1982 to 1983 event which reportedly cost more than $10 billion in damages worldwide.

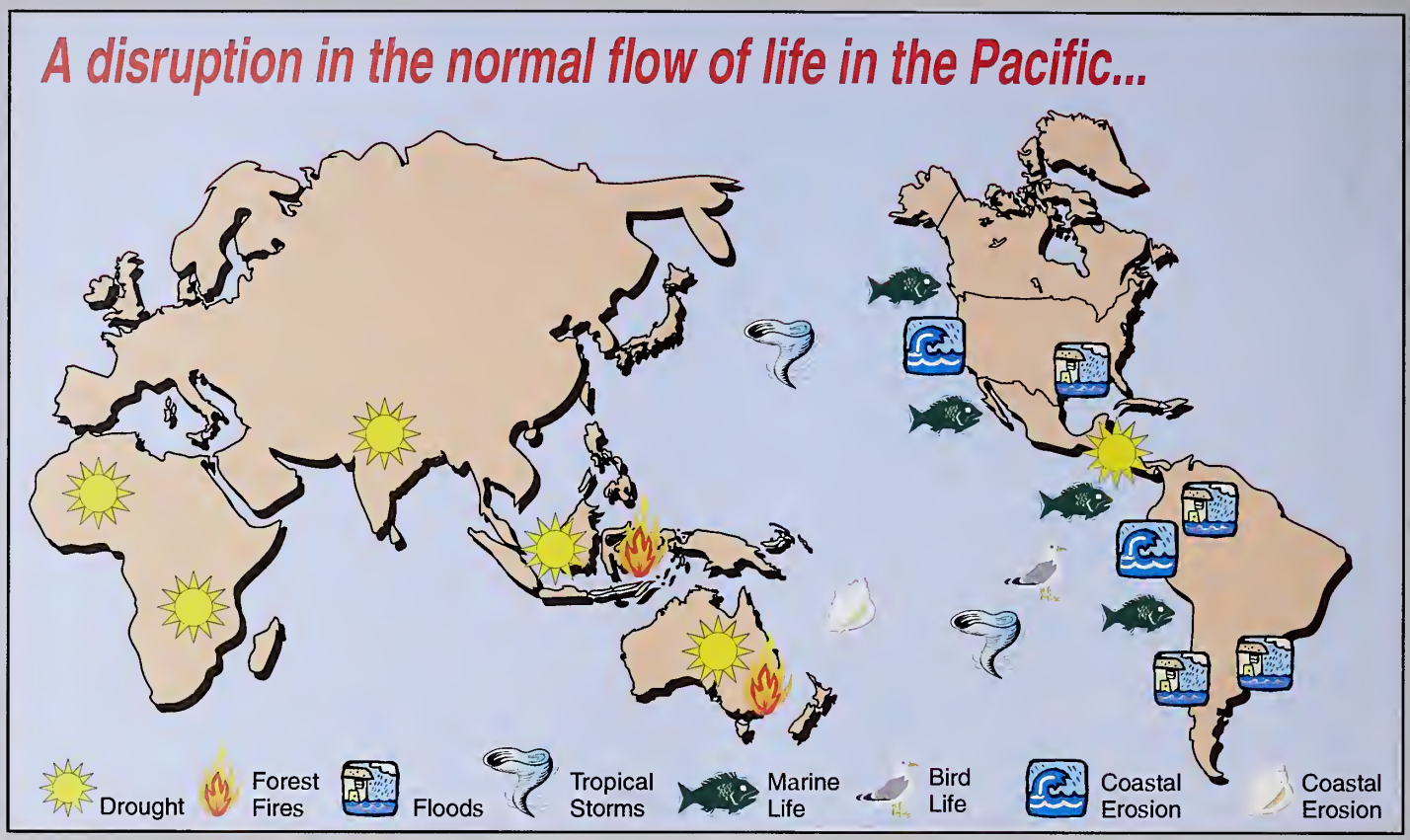


Photo by PHC William Von Seggern

Photo courtesy of NASA

One of the hardest hit areas on board Naval Station Marianas, Guam, was the senior officer housing area. Causing more than $200 million in damage and displacing more than 2,500 people. Super Typhoon Paka had sustained winds of 175 mph with one wind gust recorded as the strongest ever recorded on Earth at 236 mph.

Every two to seven years, the trade winds in the tropical Pacific weaken. Why this happens is a subject of conjecture and scientific inquiry; but, it is known that when the winds relax, a response is triggered in the ocean which originates somewhere between the Western Pacific and the coast of South America. This response, known as an equatorially trapped Kelvin wave, produces the sea-level rise, thermocline deepening and sea surface temperature (SST)



Source: NOAA

Subtle changes in the interplay of wind and water in the tropical Pacific can affect local ecosystems and human lives in far flung regions of the globe. Some of the documented environmental impacts of the 1982 to 1983 El Niño event, the strongest thus far this century, are indicated by symbols on this global map.

warming associated with El Niño. The resulting abnormally warm SSTs in the central and eastern Pacific Ocean breed thunderstorms and affect global atmospheric circulation patterns and storm tracks.

El Niño can turn global weather topsy-turvy and produce unusual patterns of hurricanes, storms, heavy rains, floods, landslides, droughts and fire storms. The climatic effects last as long as two years and can influence areas far removed from the Pacific Ocean.

The National Oceanic and Atmospheric Administration's models of the ocean and atmosphere have been predicting an ENSO since late 1996. The system's gargantuan intensity and strength only became apparent in infrared satellite imagery gathered last summer.

"We knew when the trade winds reversed for about 10 days in June that we were going to have an unusually strong El Niño," said Michael Clancy, deputy department head of the data and models department at the Fleet Numerical Meteorology and Oceanography Center (FNMOC) in Monterey, Calif. "Currently our products are showing sea surface temperature anomalies off the coast of Peru that are 5 to 6 degrees centigrade above normal. These are some of the warmest SST anomalies recorded for these locations in 50 years," he said.

People worldwide have been tracking El Niño via FNMOC's Optimum Thermal Interpolation System (OTIS) products on the World Wide Web at *<www.fnmoc.navy.mil>*.

ENSO-related climate changes are expected to peak early next year, but associated weather oddities are already making headlines: Hurricane *Nora* pelted arid Yuma, Ariz., in late September 1997, while Hurricane *Pauline* slammed Acapulco, Mexico, in October 1997. Marlin, the trophy fish prized by sport fishermen in tropical Baja, Calif., are turning up in the normally cool Pacific Northwest. In Peru, El Niño caused heavy snowfalls in mountain passes that left hundreds of vehicles stranded and 10

people dead from exposure.

Forecasters at the Naval Pacific Meteorology and Oceanography Center (NPMOC) in Pearl Harbor, are braced for a potentially severe tropical storm season.

"Our fleet customers have requested ENSO briefings about twice a week over the last three months," said LCDR Stan Akahoshi, fleet services officer for NPMOC. "While the frequency of hurricanes in the eastern Pacific is about in line with historical averages, their overall intensities are qualitatively higher. The recent Hurricane *Linda* was the most intense hurricane ever recorded in the eastern Pacific and, at one point, was forecast to move right over southern California. Luckily, for the fleet in San Diego, *Linda* went west. This ENSO has not yet brought a hurricane to Hawaii, but two of Hawaii's strongest hurricanes, *Iwa* in 1982 and *Iniki* in 1992, took place during ENSO episodes. And *Iwa* waited until November."

If the current ENSO runs true to model predictions, California and the entire southern United States will be in for a wet winter for 1998, while the north should enjoy mild climates. Hawaii may be looking at a severe winter drought similar to the one it experienced during the 1982 - 1983 ENSO. Some weather experts caution against predicting this El Niño's effects based on past experiences.

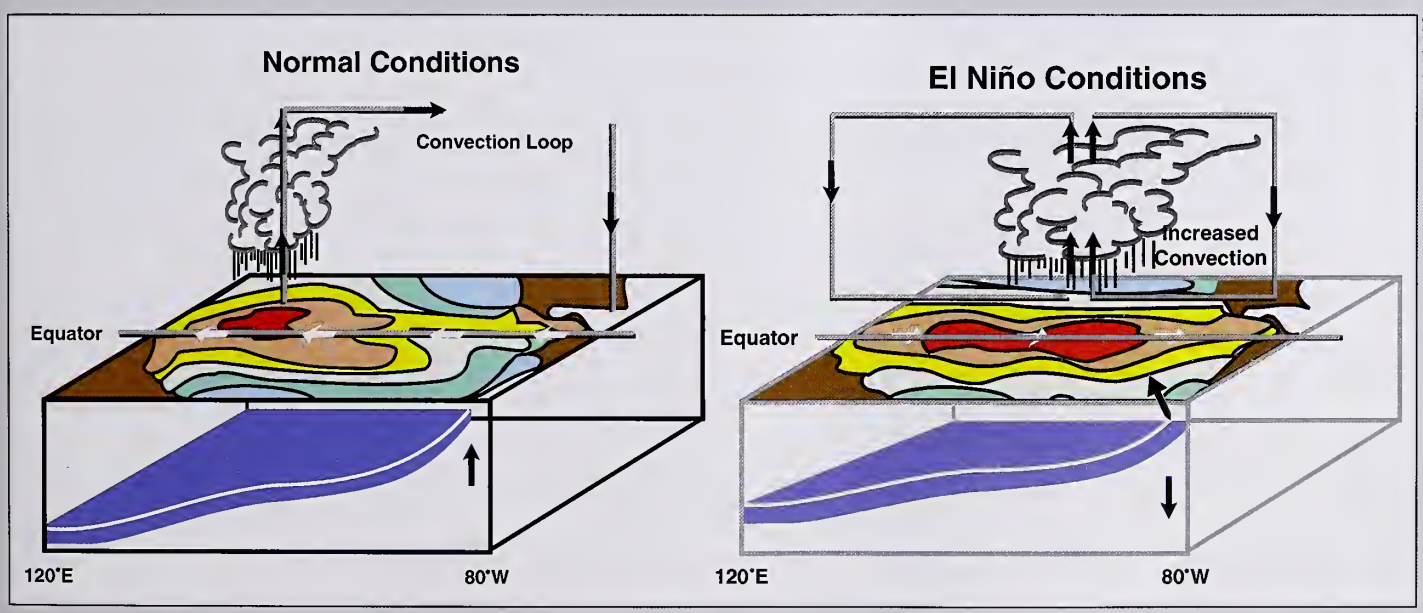
"We're coming off a year that had some really wild global weather patterns," said Bill Burnett, director of atmospheric programs for the Naval Meteorology and Oceanography Command. "Now we're looking at a very strong El Niño. We know that El Niño disrupts climate, but we don't know yet what effect it will have on these unusual weather patterns. No two ENSOs are exactly the same, and you can't blame all strange weather on El Niño. We'll just have to wait and see what happens."

Willis is the deputy public affairs officer for CNMOC.

Ocean Fact



Attemps to trace historic occurrences of El Niño events have suggested that a prolonged in El Niños caused the American Dust Bowl of the 1930s; that El Niño rains impeded the Lewis and Clark expedition in 1806; and that harsh European winters of the 1940s kept Hitler's armies from overrunning Russia.



Source: NOAA

Like partners engaged in an ongoing dialogue, the tropical Pacific Ocean and the overlying atmosphere influence and react to one another. Changes in the strength of the easterly surface winds along the equator induce ocean currents and upwelling, which cause changes in sea-surface temperature, thus altering the distribution of rainfall, and the strength of the easterlies and so on. ...





How many can you name?

For answers see Page 48

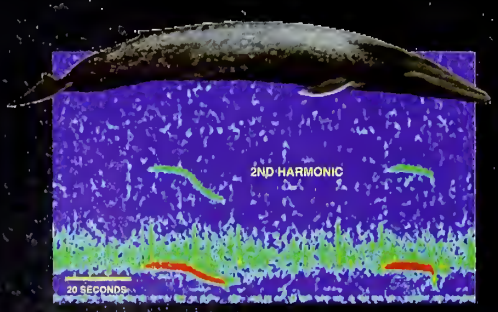
Ocean Research

Whale Song

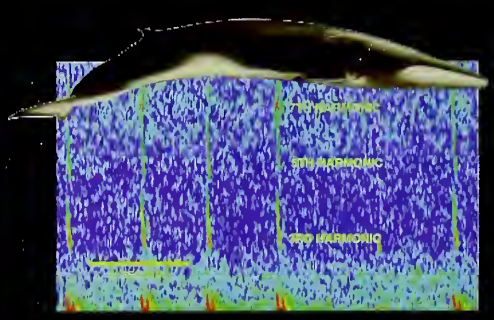
By monitoring the Integrated Undersea Surveillance System (IUSS), a network of underwater microphones designed by the Navy to detect and track submarines, scientists at the Naval Research laboratory, Washington, D.C. , have detected and recorded more whale sounds in the past five years than ever before in history!

IUSS has, in effect, opened the floodgates for whale research. Not only do scientists now have the ability to explore the entire ocean, but this technology is so advanced that it actually allows them to distinguish between different species of whales. In fact, scientists can pinpoint a particular species of whale at a given location at a specific time — even particular whales within a given species. A few years ago, one particular blue whale was tracked for 48 straight days as he traveled 1,450 miles across the Atlantic.

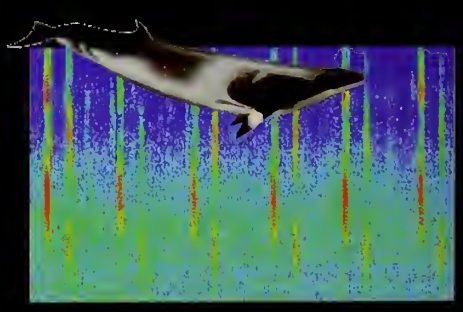
Scientists at the Naval Research Laboratory use what are called spectragrams to differentiate between different sounds in the ocean. Once IUSS has detected a particular sound, it will create a "visual representation of that sound," or a spectragram. Every object, animal or organism that makes a sound in the ocean has a different spectragram. Though this technology was designed and engineered to detect the activity of enemy submarines during the cold war, researchers have discovered that detecting whales is much easier — submarines try very hard to be quiet, while whales love to make a lot of noise.



Blue Whale



Fin Whale



Minke Whale

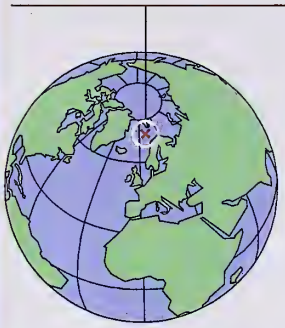
Exploring the Ocean Basins with Satellite Altimeter Data

In an age when we are mapping the surfaces of Venus and Mars, it is difficult to believe that so much of the ocean floor remains uncharted. Why? Well, the main reason is because it is covered by 2 to 3 miles of seawater! Electromagnetic waves cannot penetrate the deep ocean, therefore we cannot "take pictures" of the sea floor. Instead, common mapping practice has been to determine depth by timing the two-way travel of an acoustic pulse. But, because research vessels travel quite slowly, about 12 knots maximum, it would take approximately 125 years to chart the ocean basins using this technique! That may explain why only a small fraction of the sea floor has been charted by ships.

But, that all may be changing because of a new radar altimeter installed aboard the Seasat spacecraft launched by NASA. Recently, high density data collected by the U.S. Navy's Geosat satellite has been able to show the ocean-floor in unprecedented detail.

The Geosat altimeter orbits the earth 14.3 times per day resulting in an ocean track speed of about four miles per second. As the spacecraft orbits the earth it collects a continuous profile of height across an ocean basin. Profiles from many satellites, collected over many years, are combined to make high resolution images.

Haakon Mosby Mud Volcano

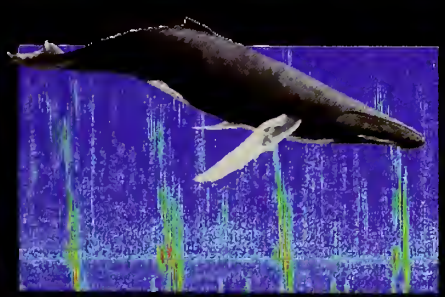


There may be "nothing new under the sun," but in the sunless depths of the ocean floor, there is always something waiting to be discovered — the Haakon Mosby mud volcano for example! The volcano was first imaged by a Naval Research Laboratory (NRL) sidescan sonar in 1989. It was later revealed to be a hydrate-covered, methane-spewing sediment volcano after an NRL-led, joint U.S. and Norwegian expedition in 1995.

Located in the North Atlantic, in water depths of more than 1 and a half miles, the Haakon Mosby mud volcano is an unparalleled natural laboratory in which to investigate the processes involved in the formation of methane in the marine environment.

Why's methane so important? Methane is a clean-burning fuel and a potent greenhouse gas. Methane pockets are highly explosive in our oxidizing atmosphere, as coal mine disasters remind us. However, in the deep ocean, where methane is more stable because of the decreased temperature and increased pressure, methane could someday become a major fossil fuel source. As a result of organic matter burial under the vast submerged continental margins, enough methane has been generated to form an immense carbon reservoir.

Visual representations of sound recorded beneath the ocean, called spectragrams, are studied by ocean researchers tracking whale movements all over the world. The sound noted on this spectragram was made by a humpback whale.



Humpback Whale

While exploring the Haakon Mosby mud volcano NRL researchers discovered several "new" species of marine life. In addition to "vermicelli-spaghetti-like" tube-worms, scientists found more than 20 new species of meiofauna (sand-grain-sized animals from various families) and a bottom-fish density more than one hundred times that found on the normal seafloor. These organisms did not have photosynthesis as the base of their food chain, but used a methane-based chemosynthesis. The fish, dominated by a species of eelpout measuring the length of a pen, congregate around the mud volcano much like seagulls do at the local dump.



Sea C



Dragon Moray Eel

Of all the creatures dwelling near the coral reef, the dragon moray eel is one of the most ominous. Because they breathe through their mouths, they often present an apparent menacing pose which is mistaken as a threat display. Eel bites are normally caused when careless divers attempt to feed or touch the eel.

Crab

There are approximately 4,500 species of crabs around the world. This particular crab is called the 7-11 crab because of its unusual markings. Hawaiian folk lore says that the seven spots are from the blood of a Hawaiian god who was bitten by the crab.





Sleeping Parrot Fish

The sleeping parrot fish is one of about 80 species of parrot fish found on tropical reefs. These fish have bright colors, large scales and a characteristic bird-like beak. The beak is used to scrape algae from coral reefs and is strong enough to leave noticeable scars in the coral. The fish grind their food and bits of coral with plate-like teeth in their throats. Parrot fish usually grow to be about a foot long, but they can get as large as four feet and weigh up to 45 pounds. At night, they spin a mucus cocoon in which they sleep protected from predators.

Tubastria Coral

A night feeder, this coral remains in its polyp during the day. About two inches in length, it is found under ledges, inside wrecks and caves and other places out of sunlight.

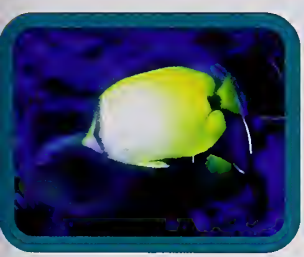
Photos by CAPT Jeff LaDouce

Critters



Sea Squirts

The sea squirt is a jelly-like animal that closely resembles a potato. These animals live on the bottom of the ocean and have a habit of squirting out water through one of two body openings. A sea squirt receives its food from water which it draws into the digestive tract through one of its openings, and it squirts out the water from the other opening. Sea squirts are commonly found fixed to pier pilings, ships' hulls, rocks, large seashells and the backs of large crabs.



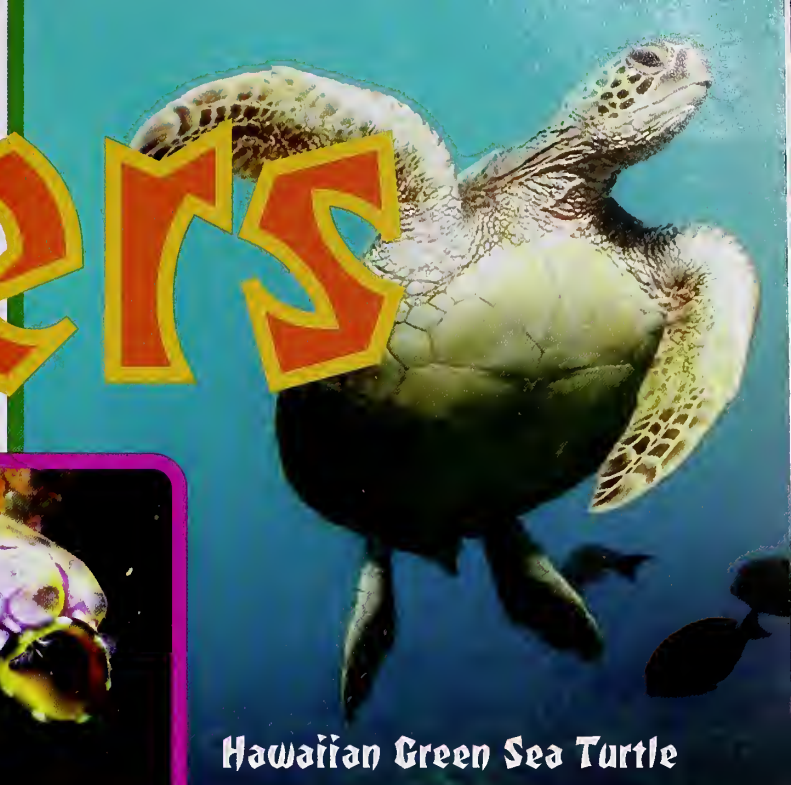
Pacific Double Sided Butterfly Fish

This fish is one of the many brilliantly colored species that live in warm, shallow waters and in areas with rich healthy corals. These fish grow to be about six inches.



Helmet

Hunting by night, these snails are carnivores and sometimes cannibalistic. This baby snail is just starting out. Adults can reach up to a foot in length.



Hawaiian Green Sea Turtle

Hawaiian green sea turtles grow slowly, taking from 10 to 50 years to reach sexual maturity. This species also ranks among the largest on Earth. Small turtles can be up to 28 inches long and weigh nearly 100 pounds - the largest can weigh as much as 400 pounds. Sea turtles swim by beating their flippers the same way a bird flaps its wings. Sea turtles cannot withdraw into their shell so they depend on their size and swimming speed for defense. They are a protected species.



Purple Flat Worm

Purple flat worms are usually found during the day crawling over limestone or volcanic rocks.



Sea Horse

The sea horse is a small, odd-shaped fish that lives in temperate and tropical waters. It has a long snout and prominent eyes. Its body is about 5 inches long and is covered with spiny, armor-like plates that protect it. The sea horse uses its tail to cling to rooted plants or growths of floating sea vegetation. Sea horses can live for as long as six years.



Scorpion Fish or Lionfish

This carnivore lives in coral and rocky reefs and grows to be more than a foot long. Its fins may be beautiful, but they are also very deadly. The lionfish will use these sharp-as-needles, poisonous spines to attack other fish. It will also use them as a defense against divers who swim too close.



Hermit Crab

Unlike other crabs, the hermit has soft, unprotected body parts. The hermit crab relies on the misfortune of snails and other mollusks for its home, twisting its body into the spiral of an empty shell. As the crab grows, it exchanges the shell for a larger one.



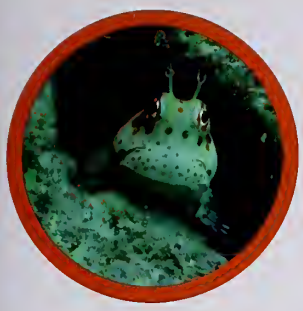
Spanish Dancer

One of the world's largest nudibranches, this species can grow to be more than a foot in length. When swimming, the white edge of its skirt resembles a flamenco dancer - thus its name.



Salmon Christmas Tree Worm

These spiral worms live in tubes within the coral. While extended, the filaments filter food down the spiral shaft to the worm's mouth.



Freckled Lip Blenny

Blennies are small (two inches) fish found in shallow water. Never venturing far from its hole, it will dart, tail first, into the hole when frightened.



Blue Chromis

This colorful fish lives in schools in shallow reef areas as juveniles. When frightened, the entire school will disappear into the coral until the danger has passed. Adults can grow as large as two and a half feet.



Blue Starfish

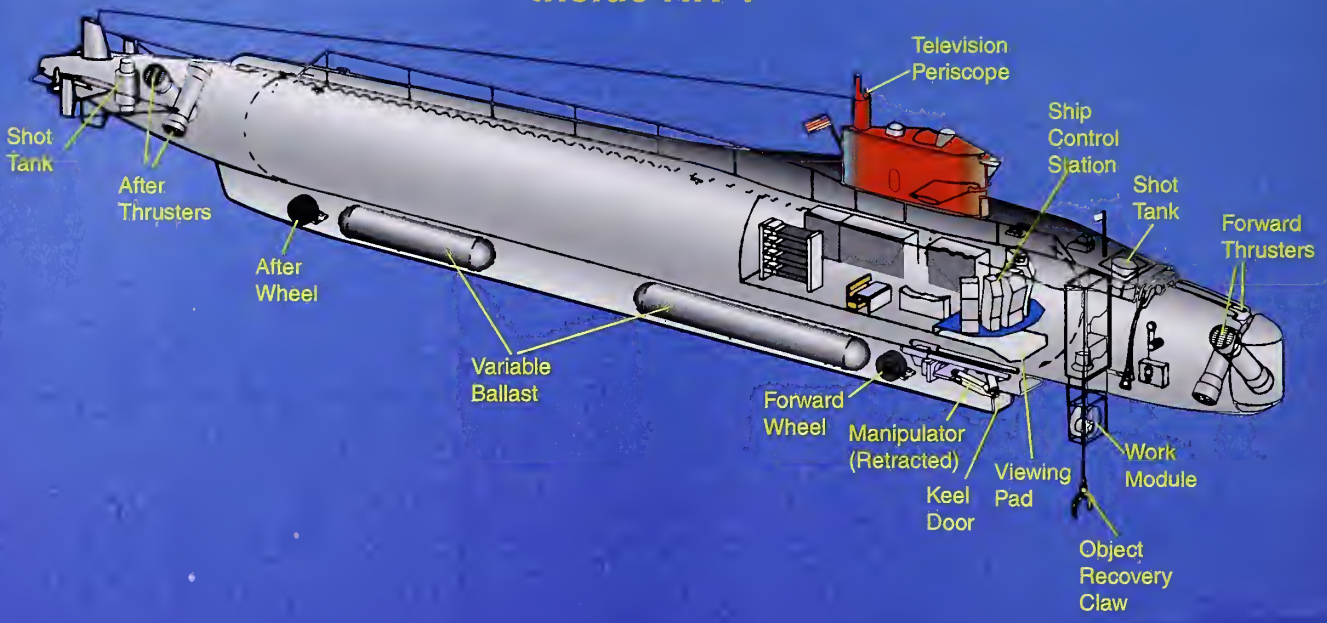
Most starfish, or sea stars, have five arms, although, some species have as many as 50. Starfish live in all of the world's oceans, but they are not fish. They are in the same family as the sea cucumber, sea lily and sea urchin. Many starfish feed on shelled animals such as mussels, clams and oysters. The animal uses the suction disk at the end of each foot for crawling and sees with a small colored eyespot located at the tip of each arm. Most starfish live for three to five years.

Hawaiian Night Octopus

The Hawaiian night octopus is a member of the octopus family, which is a large group of widely distributed, shallow-water mollusks. Octopods vary in size from 2 inches to 18 feet and may have an armspan of more than 30 feet. They crawl on the bottom of the ocean, or when alarmed, shoot swiftly backward by means of a jet of water. When threatened, they eject an inky substance, which is used as a screen. Octopods feed mainly upon crabs and lobsters, although some are plankton feeders. The body and legs of a Hawaiian night octopus are much slimmer than its relatives.



Inside NR-1


Television Periscope
Ship Control Station
Shot Tank
Forward Thrusters
Shot Tank
After Thrusters
After Wheel
Variable Ballast
Forward Wheel
Manipulator (Retracted)
Keel Door
Viewing Pad
Work Module
Object Recovery Claw



3,000 feet down

A small nuclear submarine and its crew journey to the bottom of the sea in search of answers

Story by JO2 Jeremy Allen

Most Sailors probably have never seen or heard of NR 1. But, the Navy's smallest nuclear-powered submarine has been operating since 1969.

NR 1 is 146-feet long, 12-feet wide and displaces 365 tons. Its mission is to search the ocean floor in support of geographical and oceanographic research and install and maintain underwater equipment. The sub and its support ship, SSV *Carolyn Chouest* are both homeported in New London, Conn.

During their most-recent deployment, NR 1's 11-person crew provided vital support to Dr. Robert Ballard of Wood's Hole Oceanographic Institute and the National Geographic Society in excavating three Roman-era shipwrecks in the Straits of Sicily. They also conducted a two-week search for the still-missing Israeli naval submarine, INS *Dakar*.

NR 1 is a unique nuclear submarine. With a top speed of 4 knots, NR 1 can't cover great distances quickly. In fact, its support ship, *Carolyn Chouest*, tows the submarine to each research site. The submarine can then submerge to depths of 3,000 feet and use its highly-sensitive sonar system to detect and identify objects as far as a mile away.

The submarine is equipped with a hydraulically powered manipulator arm which can be used to lift up to 1,000-pound objects from the ocean floor. NR 1 also has two retractable rubber-tired bottoming wheels that allow it to drive along the ocean floor.

NR 1 is powered by a nuclear-powered, steam-driven turbo-generator with electric-drive. "The [sub] has an unlimited life span and can operate until 2013 before it needs to be refueled," said RADM Joseph Krol, director, Deep Submergence Branch.

NR 1's ability to research the ocean floor is possible because of its ability to see and record the deep sea environment. The sub was designed with three 4-inch viewports positioned on its bottom, 19 250-watt gas discharge lights, eight 1000-watt and two 500-watt incandescent lights and 16 low-light TV cameras.

Allen is a staff writer assigned to All Hands.

JASON'S Argonauts

For nine years the Jason Project has given children the opportunity to journey to some amazing places without even leaving home.

Students in classrooms around the world are talking about it. Maybe you've even seen it on a trip to the aquarium. Or maybe it's still a mystery to you. And what is this wonder of the world, you ask? KELP is the buzzword around town these days, and it's coming to a computer screen near you via "kelp cam," a live view of Monterey Bay Aquarium's kelp forest exhibit. This virtual field trip to the bottom of the sea is just one aspect of *Jason Project IX*, Oceans of Earth and Beyond.

The *Jason Project* is celebrating the International Year of the Ocean with an entertaining and educational excursion to the waters of Monterey Bay, Calif.; Bermuda; and the Guaymas Basin, where scientists, students and teachers will explore ocean environments and the life they maintain (including, of course, kelp).

In its ninth year of existence, *Jason Project* was founded by Dr. Robert Ballard after he discovered the wreckage of the RMS *Titanic* in the North Atlantic. Thousands of children sent him letters expressing their desire to join him on his next adventure, and Ballard obliged by creating *Jason*, an interactive, long-distance and hands-on learning program designed to get students excited about the sciences. So far, the project has been incredibly successful.



Dr. Robert Ballard founded the *Jason Project* to give students all over the world a chance to join him on his undersea explorations.

This year's project featured innovations utilized in past projects as well as several new technological feats. Students located at PINS (Primary Interactive Network Sites) around the globe watched live, via satellite and the internet, as Ballard and his team of scientists and student and teacher "Argonauts" probed the mysteries of the deep at Monterey Bay. Conducting experiments and maintaining a lookout for organisms rarely observed, Ballard and his Argonauts broadcast each facet of the expedition during a two-week period in March from the Monterey Bay Aquarium.

The Argonauts worked from the ship *McArthur*, a member of the fleet of the National Oceanic and Atmospheric Administration (NOAA).

During *Jason Project VII*, Ballard and his team were given the opportunity to travel with U.S. Navy nuclear-powered research submarine NR-1 as it mapped previously-unexplored areas of Florida Coastal waters. "What I enjoyed most was the honor of going down in the NR-1 submarine. At the 300-foot depth, the ocean bottom is like the surface of the moon," raved one *Jason VII*



➤ A teacher Argonaut prepares for a live broadcast during *Jason Project VII* in the Florida Keys. During this two week expedition, Dr. Robert Ballard and his team of scientists, students and teachers made 20 live broadcasts to students located at Primary Interactive Network Sites (PINS) around the country and around the world. Twenty-seven PINS are located throughout the United States, with one each in the United Kingdom, Mexico and Bermuda.

student Argonaut.

During the summer of 1997 in an independent project, Ballard used the NR-1 again in the Mediterranean Sea to find Roman shipwrecks dating back to the fourth century A.D.

Members of the *Jason IX* expedition searched for treasures of a different kind. Studying shallow, mid-water and deep ocean environments, the Argonauts took a mystical journey to Monterey Bay, where they studied coral reefs, hydrothermal vents, cold seeps, marine snow, exotic deep sea creatures and the ever-popular kelp forests.

Fifteen-year-old Jeffrey Steynor, a *Jason IX* Argonaut from Bermuda, said that *Jason* gave him "the experience of a lifetime" and has spurred him to pursue a career in the sciences.

Throughout the live broadcasts, students at the PINS and on the internet, who prepared all year for the expedition using a specialized curriculum developed by the Jason Foundation for Education, were able to take part in the project on a highly-interactive level.

Not only were they be able to discuss the project with Ballard's team, but they also had the opportunity to operate live-feed video cameras and control remote-operated vehicles on the ocean floor. This "you-are-there" technology, called "telepresence," represents a revolution in distance learning.

For the first time, the *Jason Project* featured ocean-to-ocean communication, which linked the Monterey Bay project site with its sister site in Bermuda. Scientists working from the two locations were able to examine simultaneously the Pacific and Atlantic waters to compare their findings and to communicate with students viewing the broadcasts.

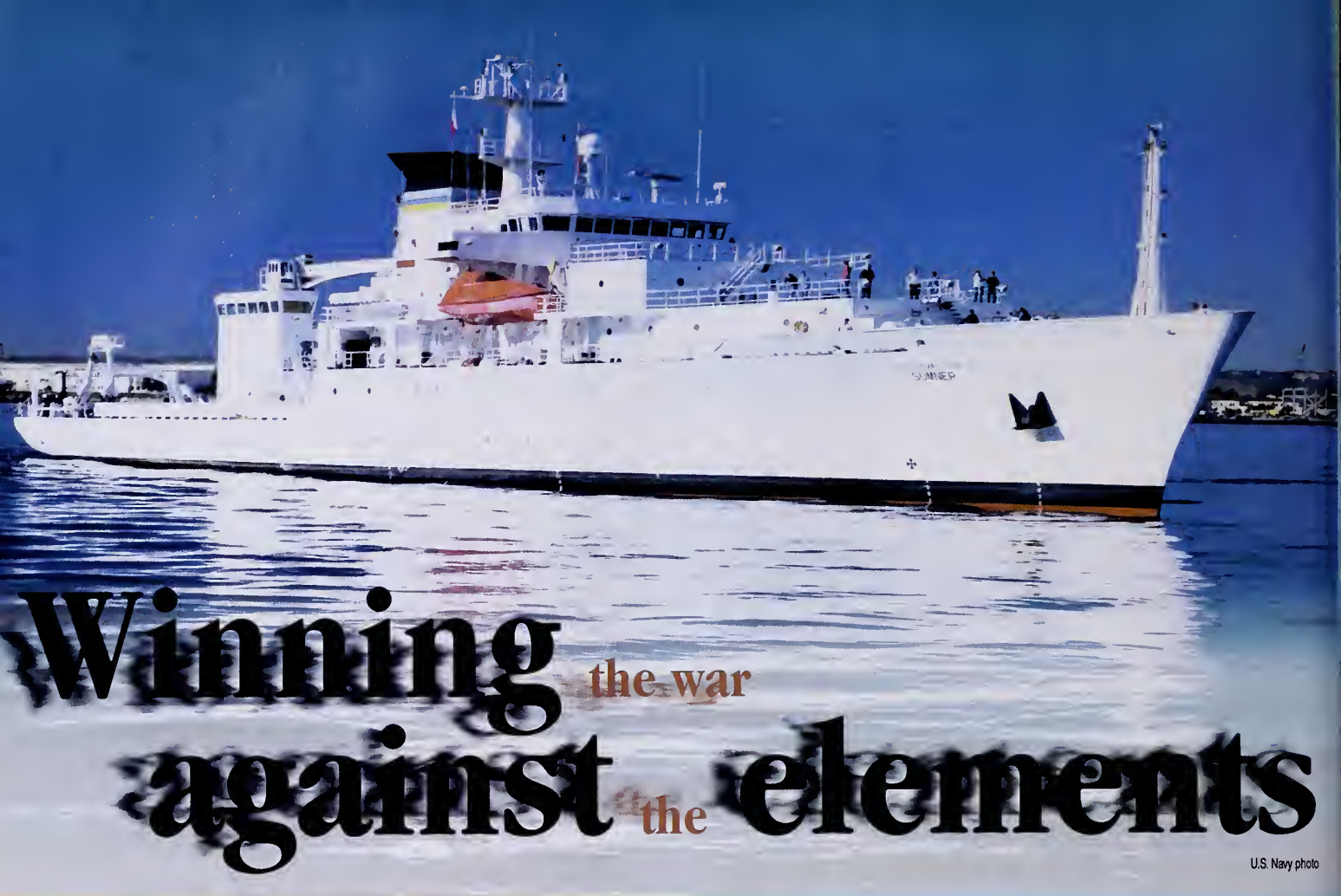
Some of the experiments students conducted onsite included researching the effects on water quality of sedimentation caused by El Niño, finding differences between kelp collected from the aquarium and kelp found in Monterey Bay and comparing "domestic" sea urchins to those who thrive in the Bay.

Jason IX also brought new meaning to the phrase "surfing the web." The internet played a major role in this year's project. In addition to the famed "kelp cam," interest in the sciences and technology has been burgeoned by Jason's website, *www.jasonproject.org*. Ballard applauds the site as a critical learning tool that has brought information on the project to more individuals than previously thought possible.

Students working with the *Jason* curriculum have fully experienced the interdisciplinary nature of the project. They started out their adventure by reading Jules Verne's 20,000 Leagues Under the Sea . They then were encouraged to discuss the novel online with other students involved in the project.

Students also followed the ongoing work of NASA researchers with the NASA Stardust mission in preparation for the expedition in March.

Next year *Jason* will travel to the rain forests of Peru for its th anniversary expedition, where Ballard and his Argonauts will once again brave the wilds in order to render science and technology exciting for students all over the world.



Winning the war against the elements

U.S. Navy photo

Oceanographic ships help others avoid the storms

Story by Steve Rosa

A guided-missile cruiser is steaming home across the Atlantic. At 1 p.m., off Cape Hatteras, it encounters winds of 21 knots and seas of eight feet. Three hours later the winds have almost doubled. By midnight the seas are 21 feet high and the cruiser is rolling hard. The ship is up against the North Wall of the Atlantic Gulf Stream where the combination of warm gulf water and cold air can rapidly generate dangerous wind and wave conditions.

Meanwhile, a submarine prowls the depths just below, playing a dangerous game of hide and seek. To complete its mission, the sub needs to know temperature distribution, current strength, bathymetric data and much more. The world under the waves is still a hazardous combination of volcanic cones, great, featureless plains, chasms bigger than the Grand Canyon and mountains that dwarf even Mount Everest. To operate undetected in such an environment can be treacherous if you don't have a detailed road map.

> *"They are stellar, state-of-the-art performers ..."*
>
> *— CAPT Craig Upton, MS22C civilian mariner and former USNS Pathfinder master*

Fortunately, Navy oceanographers and the Military Sealift Command can help. Whether it's keeping Navy ships away from heavy seas or providing charts of the undersea world, the Navy's oceanography community and its fleet of eight oceanographic ships, operated by Military Sealift Command, criss-cross the world's oceans collecting huge amounts of topographical data.



Photo by Gail S. Cleere

USNS *Pathfinder* First Mate Charles Rodriguez demonstrates how to lower the conductivity, temperature and depth (CTD) probe for *Project Marco Polo* students.

Despite their size (about 300 feet in length), oceanographic ships play a vital role in national defense — by allowing the Navy to go about its business. These ships take the ocean's pulse. They help to maintain an ever-growing database of nautical information used by mariners all across the globe. More than anything, they provide ship captains with the information they need to make an accurate assessment of oceanographic conditions.

To keep navigational science and safety progressing, a new class of ships, the T-AGS 60 class, is taking the oceanographic world by storm.

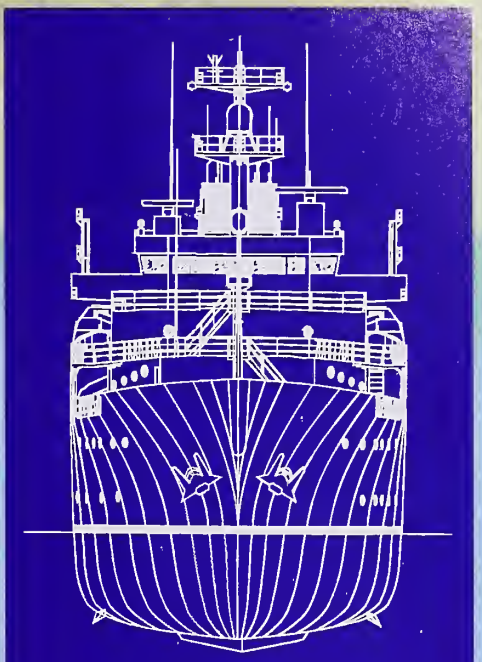
"They are stellar, state-of-the-art performers," said CAPT Craig Upton, an MSC civilian mariner and former USNS *Pathfinder* master. "With their ultra-modern propulsion systems and high-tech survey equipment, the result is something to be proud of."

The result is a class of five ships, with four operating and one under construction. MSC civilian mariners operate the ships and assist Navy oceanographers with oceanographic surveys. Twin z-drive motors give the ship remarkable handling. Combined with a global positioning system on board, these ships have a much-improved station-keeping ability.

T-AGS 60 ships are chock full of specialized oceanographic equipment: ocean floor, current, temperature and velocity profilers; a seismic system, to measure underwater seismic activity; a magnetometer, for mapping the earth's magnetic field; a sonar system capable of charting waters from 10 to 11,000 meters in depth; and a surface weather monitoring system. All the electronics add up to one very impressive ship; one that is capable of gathering mountains of data on various ocean phenomena in a very short time.

Oceanography is an on-going study because the oceans are alive. Humans change things; nature changes things. Oceanographic ships are deployed to ensure those changes are on record — by watching the ocean and waiting for her to reveal her secrets.

Rosa is a public affairs specialist with Military Sealift Command, Washington, D.C.



Length, Overall	329 ft
Beam	58 ft
Draft at Full Load	19 ft
Displacement at Full Load	5,000 LT
Lightship Displacement	3,019 LT
Speed, Sustained	16 Kts
Station Keeping	300 foot radius with 2 Kts current, 27 Kts wind
Endurance	12,000 NM @ 12 Kts plus 29 days @ 3 Kts with 10% Fuel Reserve
Power Plant Diesel-Electric System	8,520 KW @ 600 VAC
Propulsion Motors	(2) Main Z-Drives 8,000 HP
Bow Thruster	Retractable @ 1,500 HP
Ice Strengthening	ABS Class C
Certification	USCG Certified/ABS Classed
Total Accommodations	55
Officers and Crew	25
Scientists	27
Spares	3

Ocean Fact

The United States has more than 95,000 miles of coastline and more than 3.4 million square miles of ocean within its exclusive economic zone.



OCEAN VOYAGERS

Project Marco Polo *continues to expand the horizons of young people all across the country.*

Story and photos by Gail Cleere

Marco Polo was one of the greatest explorers this world has ever seen. His thirst for knowledge pushed him to the farthest reaches of his known universe. But, it was his respect for the cultures he encountered that earned him a lasting legacy.

By the turn of the 14th century, Marco Polo was famous. His book, *Description of the World*, based on his travels to central Asia and China, was the most widely read book in Europe. It influenced many of the early explorers, including Christopher Columbus.

Today, Marco Polo's name and legacy are still influencing explorers around the world. For the past eight years, the Navy and the National Geographic Society have co-sponsored a program that takes students and teachers overseas on the Navy's



Steve Fragoza, a student from San Antonio, Texas, never saw anything like the creatures found in the bottom trawler.

While sailing from Tangier, Morocco, to Syros, Greece, USNS *Pathfinder* Master Curt Smith demonstrates how to use a sextant to Ben Korin, a student from Bethel, Conn.

oceanographic survey ships. *Project Marco Polo* emphasizes oceanography, as well as the need for a greater understanding of the customs and traditions of foreign cultures.

Going where few students and teachers have gone before, *Project Marco Polo* participants have journeyed to locations as diverse as Indonesia, Egypt and North Africa.

This past summer, *Project Marco Polo* was conducted aboard USNS *Pathfinder*. Traveling from Lisbon, Portugal, to Syros, Greece, students and teachers from Texas, Oklahoma, Mississippi and Connecticut studied geography, history, language and the arts as they immersed themselves in the customs and traditions of foreign cultures. While at sea, they dropped bottom cores, studied oceanography and meteorology, practiced the art of navigation and even performed biological studies on marine life. The experience prompted Bill DeGrazia, a teacher from Connecticut, to write in his journal, *"Salinity tests on the aft deck this morning — it doesn't get any better than this."*

"Salinity tests on the aft deck this morning — it doesn't get any better than this."

- Bill DeGrazia
Teacher



Erika Curtis, a student from New Braufels, Texas, eyeballs the red starfish she found among the other sea creatures pulled up in the bottom trawl conducted aboard USNS *Pathfinder.*

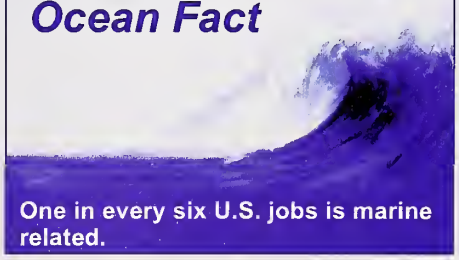
Project Marco Polo will tack in a new direction this year. With a grant from the Navy, St. Norbert College, DePere, Wis., will assume management of the program via the *Ocean Voyagers* program and add a few new twists. The teachers selected for the program will now take a more active role in developing the curriculum. As opposed to past years, when participants were merely exposed to oceanographic operations, teachers will now be more focused on bringing oceanography and world studies into the classroom, with a hands-on curriculum. These curricula will be available on the *Ocean Voyagers* website (*http://voyager.snc.edu*).

This summer, in honor of *Year of the Ocean*, six winners of the National Ocean Science Bowl (one teacher and five high school students), and a teacher and a student selected through the Mississippi Science and Engineering Fair will participate in *Project Marco Polo*. They will board the Navy's oceanographic survey ship USNS *Pathfinder* and perform a variety of oceanographic surveys en route to Lisbon, Portugal where they will attend *Expo '98*. At one point in the survey, the *Project Marco Polo* participants will join the six middle school teachers embarked with the *Ocean Voyager* program.

Marco Polo's legacy of learning is alive and well in the hearts and minds of these brave explorers who sail in his name. These *Ocean Voyagers* will surely chart new educational seas!

Cleere is the public affairs officer for Oceanography of the Navy.

Ocean Fact



One in every six U.S. jobs is marine related.

HOW WEATHER & WATER AFFECT LITTORAL OPERATIONS

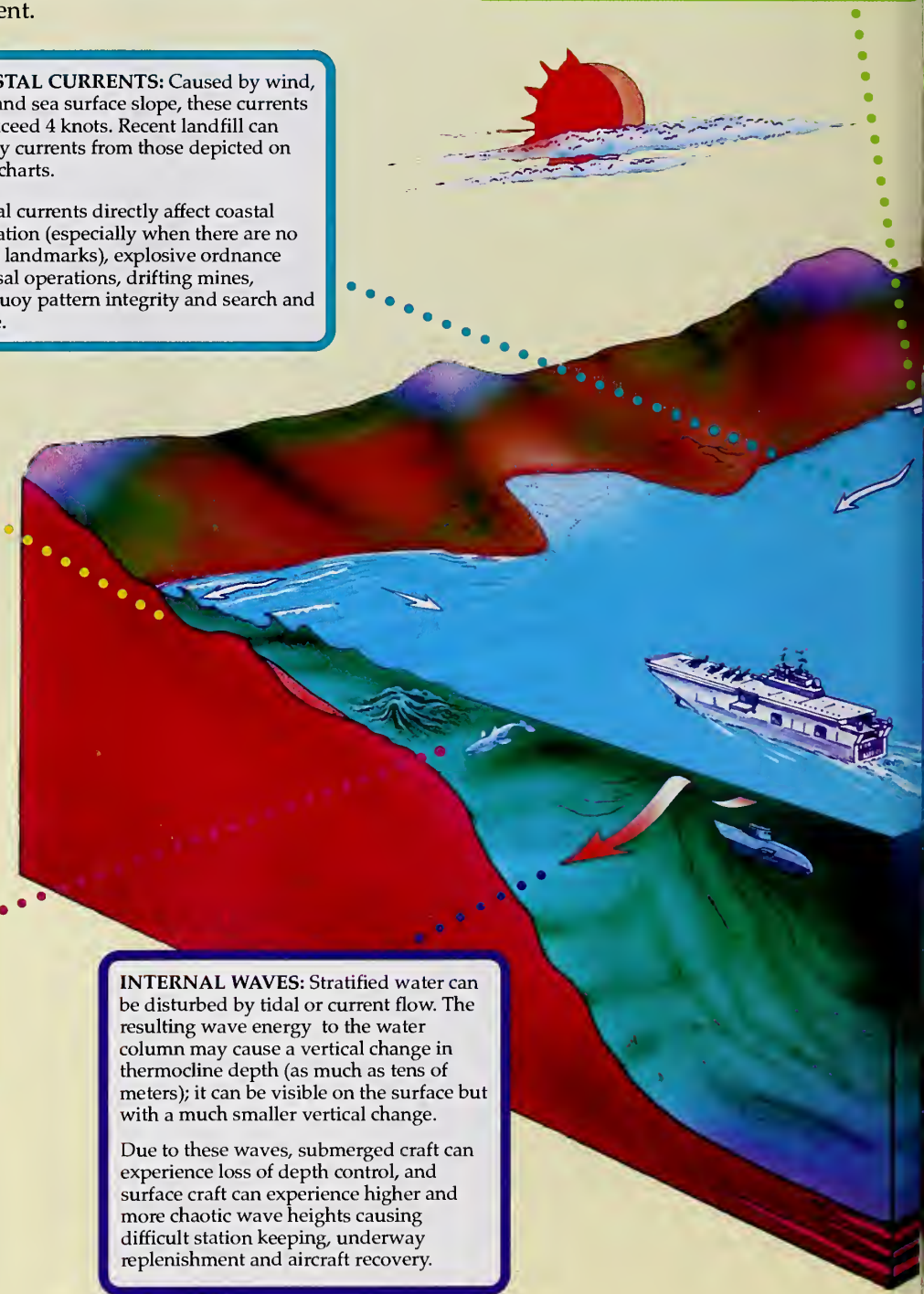
The littoral zone is that area extending from coastal waters inland along the shore. Although deep water operations remain important, it is critical that Sailors and Marines learn how to operate in this rather unique environment. In the littoral, there are a number of weather and oceanographic factors which can affect our ability to fight. Here, we present only a few of the more prominent.

LAND-FAST ICE: Consolidated sea ice attached to the coast can typically extend offshore to 2 to 25 meter depth with extreme extents (100 to 200 km) observed in vicinity of offshore islands. It will cover constricted channels and bays regardless of depth and ridges of 1 to 3 meters may occur with maximum thickness of 2 to 3 meters. Ice will modify the salinity of water.

Ice can become an extreme navigational hazard. Coastal ports are often inaccessible without icebreaker support. Ice may also be a formidable obstacle to amphibious craft, swimmers and torpedo. It impairs submarine operations due to decreased depths.

COASTAL CURRENTS: Caused by wind, tides and sea surface slope, these currents can exceed 4 knots. Recent landfill can modify currents from those depicted on older charts.

Coastal currents directly affect coastal navigation (especially when there are no visual landmarks), explosive ordnance disposal operations, drifting mines, sonobuoy pattern integrity and search and rescue.



BEACH PROFILE: Sand profiles change seasonally and often after storm passage; barred beaches with rip currents are common.

Equipment-laden troops can drown in deep trough inshore of bar; wave activity adversely affect amphibious craft.

LITTORAL MARINE LIFE: Dangerous marine life (e.g., jellyfish, scorpion fish, saltwater crocodiles) may be present, and typically there is more marine life present than in near-surface open ocean.

These creatures can present a possible hazard to reconnaissance personnel. Kelp beds can impede special warfare and amphibious operations.

INTERNAL WAVES: Stratified water can be disturbed by tidal or current flow. The resulting wave energy to the water column may cause a vertical change in thermocline depth (as much as tens of meters); it can be visible on the surface but with a much smaller vertical change.

Due to these waves, submerged craft can experience loss of depth control, and surface craft can experience higher and more chaotic wave heights causing difficult station keeping, underway replenishment and aircraft recovery.

TERRAIN-FORCED THUNDERSTORMS: Generally occur in the afternoon; these storms cause wind shear, heavy rain, hail and high winds.

They represent a danger to airborne operations and can degrade communications and mobility.

ONSHORE WIND: Afternoon occurrence; 8 to 14 knots; extends 5 to 10 nautical miles; can cause higher sea states; coastal hills can lift moist sea air generating clouds.

With these winds, periscope and mine detection become difficult; there are increased breaker heights in the surf zone, and inland targets may be obscured.

Ocean Fact



How much power exists in a wave? Kinetic energy of motion, in waves is tremendous. An average 4-foot, 10-second wave striking a coast puts out more than 35,000 horsepower per mile of coast.

OFFSHORE WIND: Nighttime occurrence; 4 to 6 knots; extends 2 to 4 nautical miles offshore; can carry land smoke, fog and dust offshore, reducing atmospheric visibility.

This reduced visibility can hamper coastal surface operations and cause potential dust related aircraft engine problems at sea.

TERRAIN-FORCED WIND: Terrain can force a wind direction change that may cause low-level turbulence from wind shear between wind above terrain and wind between terrain.

Therefore, air drops, parachute/glider/helicopter operations and low-level tactical air operations become more difficult and dangerous.

RIVER DISCHARGE: Fresh, often colder and less dense water enters salty, often warmer, denser water as a surface or subsurface plume, eddy or lens. Bottom sediment changes drastically due to sediment load and sediment and current flows increase.

Submarines and swimmer-delivery vehicles may require significant buoyancy compensation to prevent grounding/surface broaching. Increased current flow can affect amphibious craft and swimmer navigation.

REEFS, BARS & CHANNELS: Reefs predominate in tropical areas and are often unsurveyed. Bars and channels may change seasonally or even more rapidly; there is often rapid current flow in channels.

All three can affect approaches taken by amphibious craft, swimmers and torpedoes and can adversely affect active sonar.

BIOLUMINESCENCE: Light is produced when plankton organisms are disturbed with no correlation to weather or sea state. It can be observed from these surface to 35 feet.

The result is enhanced nighttime visual detectability of bow waves and wakes of swimmers, periscopes and surfaced and submerged craft. A ship's wake may be visible for 6 nautical miles.

SHIPWRECKS: More shipwrecks occur near shore.

These hulks can present a hazard to navigation, but a bottomed sub can merge her signature with a shipwreck to escape detection.

Art & Text by CAPT Dennis Whitford

Pathfinder of the Seas

Matthew Fontaine Maury is credited with the founding of an entirely new science, the "physical geography of the sea," known today as oceanography.



Story by LCDR John Kirby

In the autumn of 1852, four commercial clipper ships began a race from New York to San Francisco. The goal wasn't to see who got there first, but to see who got there the fastest. So they staggered their departures, putting to sea at various intervals between October 12 and November 14. Such races were common then; clipper ship captains couldn't resist the temptation to compete, and the 15,000-mile New York to San Francisco run was one of the most heavily plied by the commercial maritime industry. But this contest was special. The race course had been charted by an up-and-coming, young naval officer by the name of Matthew Fontaine Maury and the results would only prove to strengthen his already solid reputation in the field of ocean science.

LT Maury, then serving as Superintendent of the Navy's Depot of Charts and Instruments, was already a recognized expert in the field of navigation. He had ecently written a textbook which was eventually adopted by the U.S. Navy and had already published *Wind and Current Charts* five years earlier in 1847. That book, which was based on studies he performed at sea and from information extracted from log books kept by merchant skippers, as well as his next book, *Sailing Directions*, proved highly valuable in reducing sailing times around the world. Indeed, ships had been using them to such success that the New York to San Francisco route was cut from an average of 187 days to only 144. The four clipper ship captains carried these books aboard their vessels as they raced to San Francisco.

Throughout November and much of December, the clipper *Wild Pigeon* held a commanding lead, despite having to divert off course due to poor winds. But on December 30, lookouts sighted another ship astern. Unbelievably, it was *Flying Fish*, which had set sail three weeks after *Wild Pigeon*! The two were now locked in a nip and tuck race to the finish, with *John Gilpin* a close third. *Flying Fish* eventually won, arriving in



aury's charts revolutionized travel on the world's oceans and earned him the title "Pathfinder of the Seas."

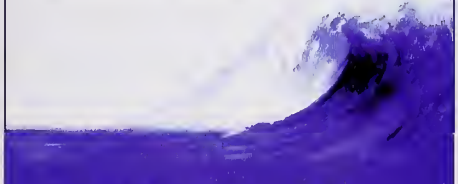
San Francisco on the last day of January 1853, having completed the journey in an astounding 92 days and 4 hours.

Maury had, at the age of 46, revolutionized merchant traffic on the high seas. As one merchant skipper wrote to him, "until I took up your work, I had been traversing the ocean blindfolded."

1853 would turn out to be a big year for Matthew Fontaine Maury. By summer, he had become internationally famous for his chart work and dubbed the "Pathfinder of the Seas." Even so, he recognized there were vast areas of the world for which he had insufficient data and knew that he would need to enlist the help of every nation on Earth in order to gather the information he and the world needed. Thus, he began to push for the creation of a world meteorological organization. His vision was soon realized and although he was invited to preside over the inaugural international maritime conference held in Brussels, Belgium, in August 1853, he declined. He did, however, make the opening address to the conference which adjourned September 8, after having adopted internationally standardized forms and instructions for the collection of meteorological observations. This alone made the conference a huge success. However, it was the spirit of cooperation exhibited by the participating nations that struck Maury deeply. As he would write later: "Rarely has there been such a spectacle presented to the scientific world. ... Though they may be enemies in all else, here they are friends. Every ship that navigates the high seas with these charts and blank abstract [is] a temple of science." For his efforts at the conference, Maury was credited with founding an entirely new science, the "physical geography of the sea," known today as oceanography.

Later that year, Maury began

Ocean Fact



The first successful transit under ice at the North Pole was made by USS *Nautilus* in 1957. Today, Navy oceanographers regularly map the ice edge to ensure safe passage for ships and submarines.

work to locate the best route for an underwater transatlantic cable. Using a deep-sea sounding apparatus designed at the Naval Observatory (of which he had also been made superintendent), Maury began to collect specimens from the ocean bottom. From his study of these specimens, he discovered the existence of a relatively shallow underwater plateau across the Atlantic from Newfoundland to Ireland. In a letter to then-Secretary of the Navy James C. Dobbin, he described it as having precisely the correct attributes to hold the wires of a transatlantic cable. "It is neither too deep nor to shallow, yet it is so deep that the wires being once landed will remain forever beyond the reach of vessels' anchors, icebergs and drifts of any kind, and so shallow that the wires may be readily lodged upon the bottom."

In 1858, after serious consultation with Maury, American industrialist Cyrus Field and the British-based Atlantic Telegraph Company laid the first transatlantic cable along this plateau, establishing for the first time in history instantaneous communication between the Old World and the New. The first official message sent over the cable was from Queen Victoria to President James Buchanan. In his reply, the President called the cable, "a triumph more glorious ... than was ever won by conqueror on the field of battle." For his part in locating the cable's bed, Maury was praised as the "indefatigable investigator of the ocean depths."



Maury's discovery of a relatively shallow plateau across the Atlantic allowed the first transatlantic cable to be laid in 1858. Here HMS Agamemnon receives the cable onboard while at anchor.

With the establishment of the transatlantic cable, Maury had once again made history. However, the Sailor scientist's crowning achievement was probably his first commercially printed book, *The Physical Geography of the Sea*. Published in 1855, the book contained a wealth of new discoveries presented in a simple, easy to understand style. For example, Maury used information gathered from whaling vessels to theorize about the existence of a Northern passage from the Atlantic to the Pacific. Because whalers sometimes marked their harpoons with both the date and the name of their ship, when whales captured near the Bering Strait had harpoons in them from ships known to cruise the waters of the North Atlantic, Maury concluded that the dates were too recent for them to have gone from Atlantic to Pacific by way of Cape Horn or Good Hope. "In this way," wrote Maury, "we were furnished with circumstantial evidence that there is ... open water communication through the Arctic Sea from one side of the continent to the other, for it is known that the whales can not travel under the ice for such a great distance."

> ***"Navies are not all for war. Peace has its conquests, science its glories. And no Navy can boast of brighter chaplets than those which have been gathered in the fields of geographical exploration and physical research."***
>
> ***— Matthew Fontaine Maury***

In addition to his many remarkable discoveries, the book also included detailed charts and diagrams explaining everything

from wind and currents to temperature and tides.

The Physical Geography of the Sea received swift praise and became a huge bestseller. In its first year of publication alone, the book went through five printings. Maury was becoming famous both at home and abroad as the book was subsequently printed in France, Holland, Germany and Italy. Great Britain's Royal Astronomical Society called it, "one of the most fascinating books in the English language." The book was revolutionary. It was the first book ever to embrace the entire sea as its theme, and it did so in a way which everyone could appreciate. It brought the world of oceanography to the common man. Perhaps more importantly, the scientific principles which Maury set forth remained relevant for many years afterward, making his book the model for all writers of popular science.

Later in 1855, a naval board that had been convened to review the officer list inexplicably placed Maury on a leave of absence. At the height of his fame, Matthew Fontaine Maury was out of a job. Through persuasive arguments and the help of Senator Sam Houston of Tennessee, Maury was reinstated in 1858 at the rank of full commander. He continued on in his duties at the Naval Observatory until 1861, when war broke out between the states. Feeling greater allegiance to his home state of Virginia than to the Union, Maury resigned his commission and volunteered for service in the Confederate Navy. He served for a time as the coordinator of Southern coast, harbor and river defenses before being shipped off to Great Britain for duty as a Confederate emissary. In that capacity he was able to procure a number of warships for the fledgling rebel navy, including the *Georgia*, which sailed from Scotland in April 1863 and captured several Union prizes. After the war, Maury worked in Mexico as the immigration commissioner, wrote several more scientific books and eventually settled down to life as a professor of meteorology at Virginia Military Institute. He died Feb. 1, 1873.

Matthew Fontaine Maury was one of the greatest scientific minds of his time and one of our Navy's most influential pioneers. Because of him naval personnel began to fully understand the medium in which they work — the sea. That we have come so far in our knowledge of the oceans, and that we have grown to be such good stewards of the environment is directly creditable to this talented "Pathfinder."

Kirby is the head of still media, Naval Media Center, Washington, D.C.

THE MAURY PROJECT

The Maury Project, named for Matthew Fontaine Maury, is the American Meteorological Society's comprehensive national program of teacher enhancement based on studies of the physical foundations of oceanography. It is conducted in partnership with the United States Naval Academy and the National Oceanic Atmospheric Administration. It is directed toward improving teacher effectiveness in generating interest and understanding in science, technology and mathematics among pre-college students at all grade levels and across the curriculum.

A major component of the Maury Project is the offering of training and information sessions to teachers around the country on oceanographic topic and issues. The sessions are conducted by Maury Project Peer Trainers who have attended an extensive summer training program at the Naval Academy. Teachers at all pre-college grade levels seeking greater understanding of oceanography are encouraged to attend. For more information about the Maury Project contact the U.S. Naval Academy public affairs office at (410) 293-2291 or visit the Project's website at: / / atm.geo.nsf.gov / AMS / amsedu / maury.html

To learn more about the life of Matthew Fontaine Maury, visit his website at: http:// www.cstone.net/ ~wmm/MAURY/ index.html

Environmental Innovations



Environmental Aces

Naval Aviation Depot (NADEP) Jacksonville and the Jacksonville Offshore Fishing Club (JOSFC) recently added several stripped-out, Vietnam-era aircraft to an existing artificial reef off the Jacksonville coast.

Eight A-7 jets and a T-2 trainer aircraft were sunk about seven miles off the coast of Jacksonville Beach, Fla., in 70 feet of water.

For years environmentalists have been concerned about the decline of nursery habitats for several species of fish and shellfish in the Jacksonville area. This decline can be traced to increased coastal development and the ever-growing popularity of sport fishing in Florida-Georgia waters.

These much needed artificial reefs provide food, shelter, protection and spawning areas for hundreds of species of fish and other marine organisms.

This is the second time in two years the Navy has contributed military hardware to build an artificial reef in North Florida waters. In August 1995, 33 A-6 aircraft were sunk about 22 miles east of St. Augustine, at a depth of almost 100 feet. Those aircraft, which had been earmarked to be overhauled at the Grumman plant in St. Augustine, had been relegated to the scrap heap after maintenance inspectors judged the aircraft to be uneconomical to repair.

Pulp Non-Fiction

When it comes to safely and properly disposing of trash at sea, the Navy doesn't mess around. With the help of a new machine called a pulper, invented by the Navy engineers and civilian contractors at Naval Surface Warfare Center, Carderock Division and GEO-CENTERS, Inc., at-sea waste disposal just moved into the 21st century.

Pulpers are designed to process the biodegradable solid waste generated by Navy surface ships. This includes paper, cardboard and food waste. They work in much the same way as your household garbage disposal, just on a much bigger scale — much bigger. Navy surface ships generate pulpable solid waste at a rate of about 2.3 pounds per person per day. That's almost 700 pounds a day on a 300-Sailor destroyer or more than 15,000 pounds per day on a 6,500-Sailor aircraft carrier!

Plastic, glass or anything else that could threaten marine life, harm the environment or create a hazard for navigation is separated from the biodegradable waste and stored for in-port disposal.

The Navy plans to equip the entire fleet with these impressive garbage grinders by the end of the year 2000.



How does it work?

Pulpable waste is fed into a seawater-filled pulping tank, where a two-bladed cutter chops up the waste until it's a slurry that fits through quarter-inch screen. The pulp is then fed into a seawater-powered eductor, where it is discharged overboard.

Because metal, glass and plastics sometimes end up in the waste feed, the pulper is designed to separate these materials without damaging the pulper. Metal and glass end up in a collection bin called the junk trap, and plastic stays in the tank until the machine is shut down and cleaned.



Protecting Our Resources

Defending the freedom of the seas and maintaining national security are just two of the Navy's many missions - protecting the oceans and their natural resources is another. The Navy has one of the most comprehensive and advanced environmental programs in the world.

The environmental impact of training exercises has been significantly reduced in recent years by moving bombing, gunnery practice and high-speed operations away from critical habitats.

The Navy is also very involved in the protection of several endangered species, including the northern right and humpback whales and several species of sea turtles. Extra lookouts are also posted when transiting habitat areas.

Ocean Fact



One third of the nation's gross domestic product is produced in coastal areas through fishing, transportation, recreation and other industries dependent on healthy waters and marine habitats.



Ocean IQ

Ahoy mates! *Here's a quiz to test your oceanographic minds. After you select your answers, turn to Page 48 and see if you're correct. Good luck and full speed ahead!*

1. *El Niño is the name given to —*

(a) The tallest mountain in Chile.
(b) A Mexican rock band.
(c) A particular kind of Mediterranean storm system.
(d) Unusually warm surface waters in the eastern Pacific.



2. *A "bathythermograph" is —*

(a) A device for measuring wind speed and direction.
(b) Something useful for determining sound speed in the ocean.
(c) A map of sea surface water temperatures.
(d) A kind of thermostat used in the bathtub.

3. *A "tsunami" is —*

(a) A kind of Japanese sushi platter.
(b) A monsoon.
(c) What used to be called "a tidal wave."
(d) An outrigger canoe used in Polynesia.

4. *Which of these organisms is used to replace human bone?*

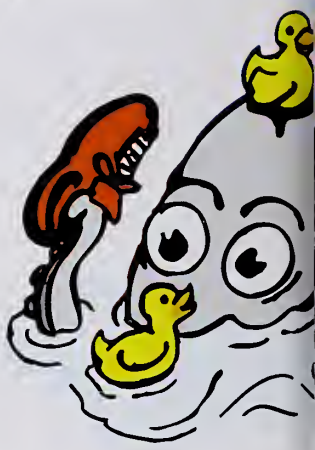
(a) Tubeworms.
(b) Zooplankton.
(c) Turtle shells.
(d) Coral.

5. *"The Pathfinder of the Seas" was —*

(a) LT Matthew Fontaine Maury.
(b) Vasco da Gama.
(c) An android character in the Star Wars trilogy.
(d) Portugal's Prince Henry, "the Navigator."

6. *Measured along a parallel, a degree of longitude always represents the same linear distance on the earth's surface.*

(a) True.
(b) False.

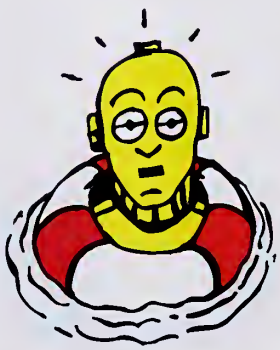


7. *When a freighter's cargo spilled in the early 1990s, 61,000 Nike shoes and 29,000 plastic duckies were dumped into the Pacific Ocean, and*

(a) They were distributed by the Navy to the poor after beach cleanups along the West Coast.
(b) Their movements were studied to "hind cast" drift and ocean current patterns in the Pacific.
(c) They were driven by winds and currents and eventually circumnavigated the globe.
(d) They were picked up by beachcombers and sold as souvenirs.

8. *Which of the following does NOT belong in the group?*

(a) The Gulf Stream.
(b) The Shamal.
(c) The Kuroshio.
(d) The Labrador Current.



9. *Normal ocean waves are fundamentally caused by —*

(a) The Earth's rotation.
(b) The tides.
(c) The wind.
(d) Geo-magnetic storms.



10. *The Oceanographer of the Navy is responsible for —*

(a) Military Oceanography.
(b) Operational Meteorology.
(c) Mapping, Charting, & Geodesy.
(d) Precise Time and Astrometry.
(e) All of the above.

11. *The difference between a "typhoon" and a "hurricane" is —*

(a) That a typhoon is bigger.
(b) The direction the wind rotates around the "eye."
(c) Whether you're in the Pacific or the Atlantic.
(d) How much it rains during the storm.

12. *The depth of the deepest point in the ocean is greater than the height of Mount Everest.*

(a) True.
(b) False.

13. *What percentage of seawater is "salt?"*

(a) About 1%.
(b) Around 4%.
(c) Around 10%.
(d) Greater than 15%.

14. *How far out to sea does a nation's Exclusive Economic Zone extend?*

(a) 3 nautical miles.
(b) 12 nautical miles.
(c) 200 nautical miles.
(d) 1000 nautical miles.

15. *How big was the highest wave ever observed at sea?*

(a) 50 feet.
(b) 90 feet.
(c) 112 feet.
(d) 165 feet.



16. *"Black Smokers" are —*

(a) Sulfate-rich hot water vents on the ocean bottom.
(b) Cigarette users with advanced lung disease.
(c) Arctic fog banks.
(d) A species of deep-ocean fish.

17. *The Beaufort scale is —*

(a) A device for weighing water samples.
(b) A special ruler used in navigation.
(c) A rare kind of fish skin.
(d) A way to describe wind speeds.

18. *Why is the North Star so useful for navigation?*

(a) It's fairly bright and easy to find.
(b) Its direction in space lines up closely with the Earth's axis.
(c) It has three easy-to-remember names.
(D) All of the above.

19. *Where are the highest tides located?*

(a) Cape Fear, N.C.
(b) Cape Canaveral, Fla.
(c) Bay of Fundy, Canada.
(d) Bay of Bengl, Bangladesh.

20. *What form of energy travels most efficiently in sea water?*

(a) Light.
(b) Sound.
(c) Radio waves.
(d) Heat.

21. *Which of the following is used from the orange roughy fish to make shampoo?*

(a) Scales.
(b) Oils.
(c) Bones.
(d) Ground fish powder.



CyberSailor

Oceans of Knowledge

Busted! I was sitting in the dentist's waiting room, for longer than I would have liked, when, in a moment of extreme boredom, I picked up one of those silly magazines for kids. You know the ones — filled with bright colors, short facts and tons of pictures. Well, as I sat there with this fluorescent symbol of youth clutched in my hands, a friend emerged from the office and took immediate notice. "Going for the intellectual stuff now, huh?" he asked sarcastically.

I quickly ditched the magazine, put on a rather sheepish grin and made excuses about boredom and the lack of good up-to-date sports mags as I waited anxiously for him to leave. Once he had gone, I gave in to an overwhelming urge to pick up the issue again. Why? Because I was having fun!

The magazine was all about the beautiful and dangerous critters living in the deep ocean. I was fascinated by these oddly shaped organisms — they looked liked something from a sci-fi flick — who reside in a world of complete darkness and extreme pressure. In a word, it was ... well ... cool.

This month, *All Hands* is dedicated to the Year of the Ocean (YOTO '98) and I decided it was a good opportunity to peruse the web for watery sites with information on the mysterious world beneath the waves.

A quick search for sites with the keyword "Ocean" brought 12,967 hits! Where to begin? A narrower search for "Year of the Ocean" gave me a more manageable 649 hits. After several hours of checking out more than 300 of these sites, I settled on a few that caught my interest.

I spent considerable time at the National Oceanic and Atmospheric Administration's (NOAA) web site dedicated to YOTO '98 (*www.yoto98.noaa.gov*). Here you'll find something for everyone. The official YOTO poster can be downloaded in .pdf (Acrobat Reader) format, along with fact sheets and brochures on the year-long observance.

The website has a variety of ocean topics, including coastal development and deep-ocean mining and exploration. Did you know that there are 3 to 500 million species living in the ocean? Or how about this... toothpaste gets its consistency from carrageenan, a product made from red algae. That same substance is also found in peanut butter, giving your favorite sandwich ingredient its speadability. Pretty cool, huh?



NOAA also hosts another site that anyone with a moderately fast connection will find entertaining. At *www.yoto.com* you'll find a page worth bookmarking. It includes a multimedia section with video clips on ocean subjects like coral reefs and the plight of the manatees. If you don't have RealNetwork's *RealPlayer* (required for viewing), there's a link to download the latest version.

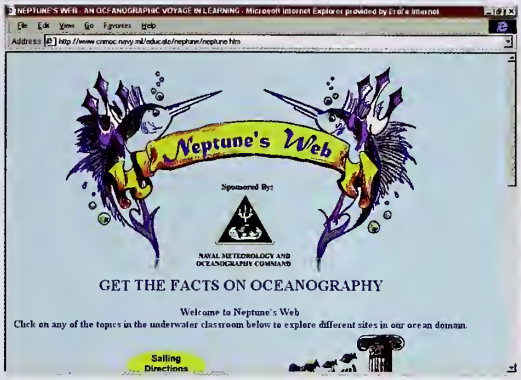
The site also features a "Question of the Day" on topics relating to the ocean. On the day I visited, the question was, "How many miles of coastline does the United States have?" A click of the mouse (after considerable pondering, no doubt) reveals the answer to be more than 95,000 miles. You can also access past questions if you're in "Jeopardy" mode.



The official YOTO '98 homepage from the United Nations' Educational, Scientific and Cultural Organization (UNESCO) resides at *ioc.unesco.org/iyo* and offers the latest information on what's happening with the

YOTO observance worldwide. In addition to finding out how to order posters and flags (free of charge), there's also links to web sites dealing with almost any ocean category you can imagine.

Now I know military web sites can be ... uh ... a bit on the conservative side. But there are Navy webmasters out there designing some pretty cool sites. One in particular belongs to Naval Meteorology and Oceanography Command (NMOC). Type in *www.cnmoc.navy.mil/educate* and visit NMOC's educational material. Here you will find Neptune's Web, a treasure trove of information on the seas and oceanography.



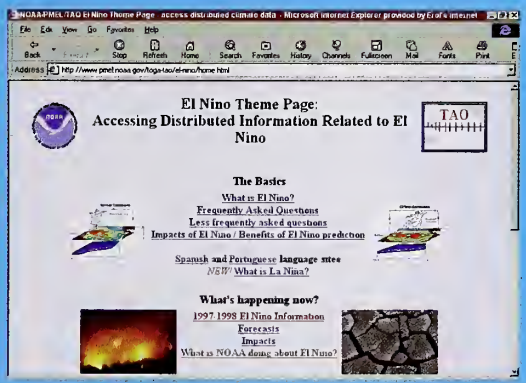
All of these sites have one thing in common with that magazine I read that day in the dentist's waiting room — the information is short and to the point. No digging through a bunch of text to get the facts on the only thing that covers the world better than the Internet — the ocean.

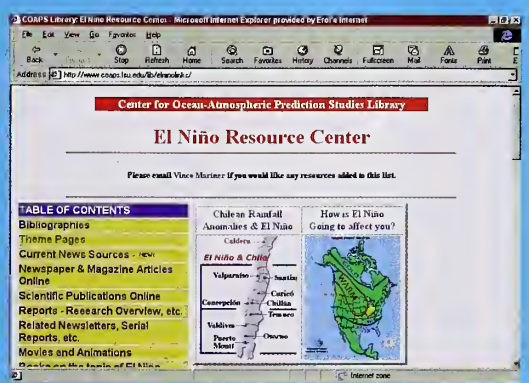
Blame it all on El Niño

What hasn't been blamed on El Niño? According to folks I've talked with, every weather condition, flu outbreak and car malfunction has something to do with this mysterious phenomenon taking place in the Pacific.

But what do you really know about El Niño? Warmer waters in the central and eastern Pacific seems to be the explanation on nightly newscasts. But a bit of cyber-research lets you know that there's a lot more to it than that.

For instance, El Niño reverses normal seasonal conditions in many parts of the world with significant impact on the environment, not to mention the economies of many nations. Check out the National Oceanographic and Atmospheric Administration's El Niño Theme Page (*www.pmel.noaa.gov/toga-tao/el-nino/home.html*) and you'll find the answers to all your El Niño questions. Within this site, you'll be able to access reports on the global and regional impact, plus an explanation of El Niño's colder sister, La Niña.





Looking for real evidence of El Niño's presence? Cruise over to Lowe's Storm98 El Niño page (*www.storm98.com/elnino*). Co-sponsored by the Federal Emergency Management Agency (FEMA), this site tells of the people and places feeling the brunt of El Niño's wrath. You'll find news reports and photos on storms hitting the west coast, as well facts on past El Niños.

El Niño affects all of us in one way or another. It's grip on the world's weather (and our wallets) will continue for a while yet. These and other sites will help you discover what is really going on.

By the way, don't try explaining to your dentist that your ability to floss has been severely impacted by El Niño — it doesn't work.

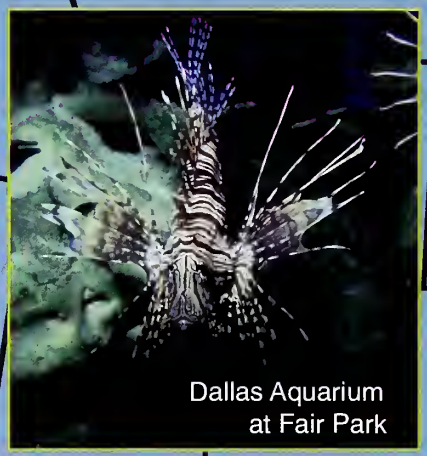
Go Exploring

Seattle Aquarium

Point Defiance Zoo
and Aquarium
Tacoma, Wash.


Monterey Bay Aquarium
Monterey, Calif.

Minnesota Zoological Garde
Apple Valley, Minn.


Dallas Aquarium
at Fair Park


John D

Omaha's Henry Doorly Zoo
Omaha, Neb.

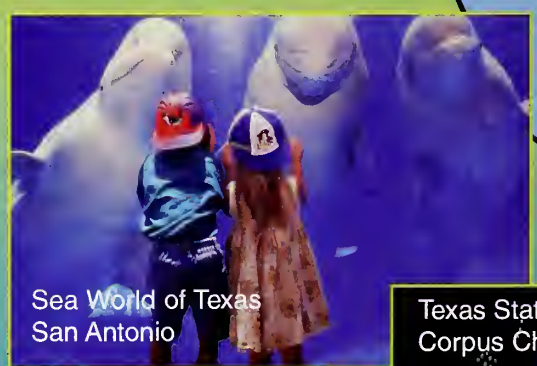
Steinhart Aquarium
San Francisco

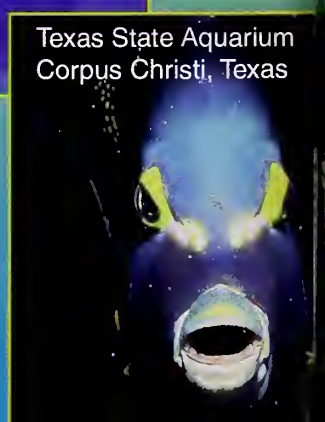
Oklahoma City
Zoological Park
Oklahoma City

Albequerque Biological Park
Albequerque, N.M.


Sea World of California
San Diego

San Antonio Zoological
Gardens and Aquarium
San Antonio


Sea World of Texas
San Antonio

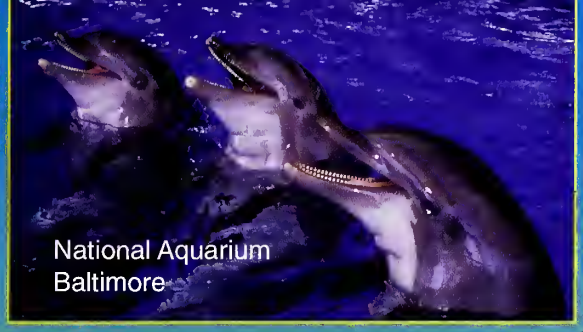

Texas State Aquarium
Corpus Christi, Texas

Waikiki Aquarium
Honolulu

Sea Life Park Hawaii
Waimanalo, Hawaii

Aquarium

Zoo\ Aquarium


National Aquarium
Baltimore

Ocean Fact

More than one-half of the U.S. population now lives and works within 50 miles of the coastline.

New England Aquarium
Boston

Aquarium for Wildlife
Conservation
Brooklyn, N.Y.

Belle Isle Aquarium
Royal Oak, Mich.

Pittsburgh Zoo
Pittsburgh

Mystic Marinelife Aquarium
Mystic, Conn.

New Jersey State Aquarium
Camden, N.J.

Aquarium
Chicago

Sea World of Ohio
Aurora, Ohio


North Carolina Aquarium
at Pine Knoll Shores

National Aquarium
Washington, DC

Indianapolis Zoo
Indianapolis

Columbus Zoological
Gardens
Powell, Ohio

North Carolina Aquarium
on Roanoke Island
Manteo, N.C.

Memphis Zoo
and Aquarium
Memphis, Tenn.

North Carolina Aquarium
at Pine Knoll Shores
Atlantic Beach, N.C.

Tennessee Aquarium
Chattanooga, Tenn.

North Carolina Aquarium
at Fort Fisher
Kure Beach, N.C.

Living Seas
Lake Buena Vista, Fla.

Florida Aquarium
Tampa, Fla.

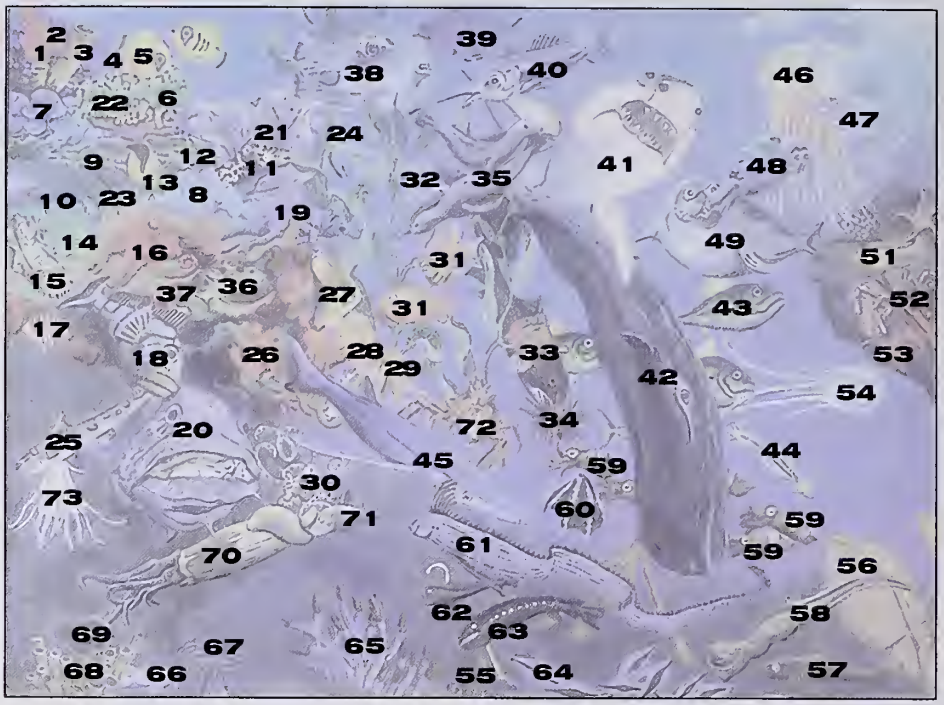
arium of the Americas
New Orleans


Dallas Aquarium
at Fair Park


Sea World of Florida
Orlando, Fla.

And the answers are ...

Check here to see how many sea creatures in the poster on Page 18, you named correctly.



Tropical or Reef Habitat:
1 Reef lobster
2 Star coral
3 Tube sponge
4 Gorgonian
5 Butterfly fish
6 Long-tentacled anemone
7 Brain coral
8 Boulder coral
9 Plate coral
10 Sea grass
11 Spotted moray
12 Butterfly fish
13 Rock beauty
14 Blue spotted ray
15 Spotted wobbegong
16 Common octopus
17 Butterfly fish
18 Nassau grouper
19 Marine iguana
20 Potato grouper
21 Purple sea fan
22 Common clown fish
23 Cortez garden eel

Temperate Waters:
24 Giant kelp
25 Leopard shark
26 Velvety red sponge
27 Vase sponge
28 Northern red anemone
29 Ochre sea star
30 Serpent star
31 Garibaldi
32 Striped jack
33 California sheepshead
34 Red sea urchin
35 Sea lion
36 Port Jackson shark
37 Troschel's sea star

Open Ocean:
38 Ocean sunfish
39 Atlantic manta
40 Billfish
41 Great white shark
42 Sperm whale
43 Yellowfin tuna
44 Arrow worm
45 Blue shark

Polar Waters:
46 Lion's mane jellyfish
47 Ice fish
48 Weddell seal
49 Ringed seal
50 Serpent star
51 Antarctic cod
52 Arctic sea spider
53 Bat star
54 Long tentacle comb jelly
55 Antarctic octopus
56 Gurney's sea pens

Deep Sea:
57 Sablefish
58 Gulper eel
59 Deep sea squid
60 Vampire squid
61 Oarfish
62 Viperfish
63 Deepsea dragon fish
64 Rift clam
65 Deep sea tube worms
66 Vent crab
67 Tube anemone
68 Tube sponges
69 Giant deep sea angler
70 Giant squid
71 Rat fish
72 Japanese spider crab
73 Deep sea jelly

Answers Ocean IQ

1. d - El Niño is short for El Niño de Navidad or "the Christ Child" because the warm water shifts happen around Christmas.
2. b - A bathythermograph provides temperature profile data (temperature vs. depth).
3. c - Tsunamis are incorrectly assumed to be caused by tides. Tsunamis are actually caused by underwater disturbances, such as an earthquake or volcanic eruption.
4. d - Since the architecture and chemistry of coral is very close to human bone, it has been used in bone grafts. It also helps human bone to heal quickly and cleanly.
5. a - (See story on Page 36)
6. False - It is true of latitude.
7. b
8. b - All except b are currents, the Shamal is a kind of wind storm.
9. c - Waves are primarily caused by winds, although earthquakes, volcanic eruptions and tides may cause waves.
10. e - Oceanography is concerned with knowledge of the oceans and improved technology based on that knowledge. Meteorology is the study of the weather and weather forecasting. Mapping, charting and geodesy deal with surveys measuring water depths, variations of the Earth's magnetic field, gravity anomalies and define the shape and texture of the ocean floor.
11. c - Hurricanes and typhoons are alike in origin, structure and features. The names given to each differ based on the area of the world in which they occur. Hurricanes occur mostly in the Atlantic whereas typhoons are found in the Pacific. Typhoons occur more often than hurricanes and are often longer and more intense.
12. True - The Marianas Trench is more than 7,000 feet deeper than the height of Everest.
13. b
14. c - The Exclusive Economic Zone refers to the coastal waters extending 200 nautical miles off shore.
15. c - Observed by the oiler *Ramapo* in the Pacific in the 1930s.
16. a - These hydrothermal vents, or fractures in the sea floor, spew sulfur compounds.
17. d - The Beaufort Scale was originally developed as a system for estimating wind strengths without the use of instruments.
18. d - The most well-known star in Ursa Minor is Polaris, or the North Star. Polaris is nearest the North Celestial Pole. If you stood at the North Pole, the North Star would be almost directly overhead. When you measure the angle of Polaris above the horizon, you can determine your latitude.
19. c - At certain times during the year, the difference between high and low tide in the Bay of Fundy is about 53 feet, the equivalent of a three-story building.
20. b - That's why sonar is the system of choice for finding submarines.
21. b - The *Hoplostethus atlanticus*, or orange roughy, is considered to be the fish with the lowest fat content. The oils extracted from the fish are used in making commercial shampoos.

Any Day in the Navy 1998

Any day of the week of May 4-10 is a typical day in the Navy. That's why it's so important to us.

Wanted are quality photographs that capture Sailors, Marines, Navy civilians, Naval Reservists and family members performing daily tasks, interacting with each other and/or otherwise contributing to mission accomplishment. The shoot has been extended to encompass an entire week to allow commands more flexibility. Selected photos will be published in the October 1998 issue of *All Hands*.

Photographs taken should reflect the diversity of both people and capabilities in the U.S. Navy and must be shot during the week of Monday, May 4 through Sunday, May 10, 1998. Photos depicting safety or uniform violations will not be considered. The best shots tend to be candid and unrehearsed, displaying the imagination and creativity of the photographer.

Submissions must include full credit and cutline information, including: full name, rank, duty station and phone number of the photographer; the names and hometowns of identifiable people in the photos; details on what's happening and where the photos were taken. Captions must be attached individually to each photo or each slide.

Photos must be processed and received (not postmarked) by *All Hands* by May 30, 1998. Photos will not be returned. Submit processed and mounted color slides, or quality color prints, either 5X7 or 8X10. Digital images will also be accepted. Just mail a zip disk containing the high resolution JPEG images with cutlines and photo credits embedded. Zip disks will not be returned. You may also download high resolution JPEG images directly to the News Photo Division of CHINFO by dialing (703) 521-1370 or (703) 521-1713. Mark all images as "Any Day Submissions."

Mail submissions to: Naval Media Center, Publishing Division, ATTN: *All Hands*, Photo Editor, NAVSTA Anacostia, Bldg. 168, 2701 S. Capitol St., S.W., Washington, D.C. 20373-5819.

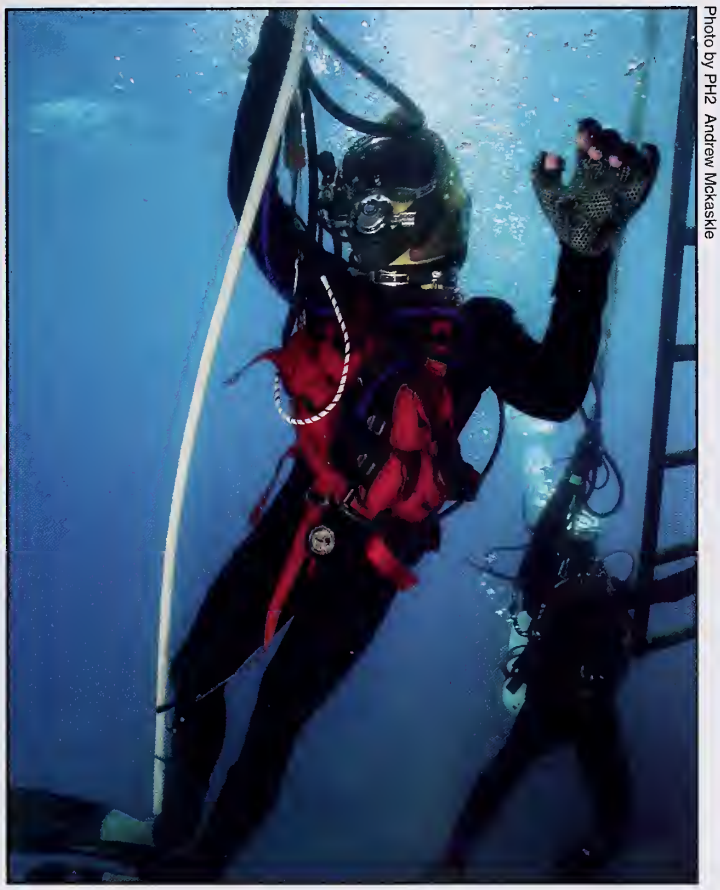


Photo by PH2 Andrew Mckaskle

Photocopy this form and attach a completed copy to each photo you submit.

Photographer:

Full name: _____

Rank: _____

Duty station (including mailing address and phone number): _____

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Photograph:

Where photograph was shot: _____

Caption (what the photo depicts): _____

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People in the photo (include first and last names, ranks/ratings, warfare designators and hometowns):

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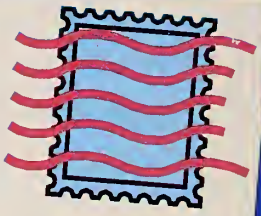
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Photo by PH1 Douglas L. Ang



Postcard from the Fleet



Name: Seaman Christopher S. Roath

Command: Explosive Ordnance Disposal Mobile Unit 3, Det. MK-6, Naval Amphibious Base Coronado, San Diego.

Hometown: Tampa, Fla.

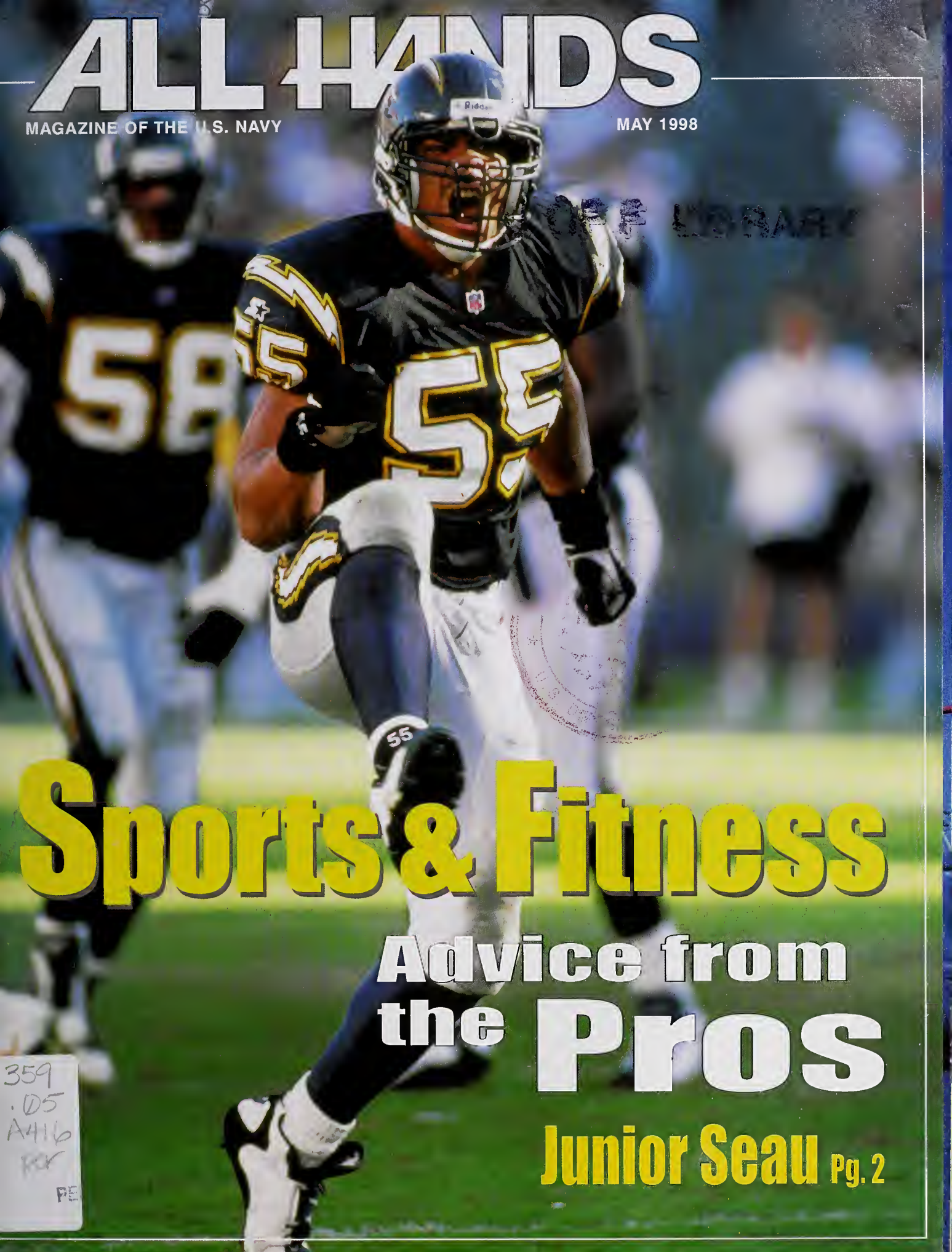
Hobbies: Working out (weight lifting), soccer, football, swimming and scuba diving.

Favorite Duty Station: EOD Mobile Unit 3.

Favorite Quote: "Seize the day."

Key to Success: "Never give up, no matter how hard. Find out what you want and go full force to achieve it. If you work hard enough, you can get anything you want."

Goals: "I want to finish my degree in business and psychology, get my commission, become a SEAL and start my own psychology practice someday."



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ALL HANDS
May
Number 972

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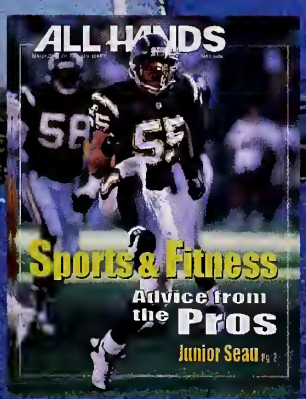
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San Diego Chargers Linebacker Junior Seau dances after sacking the quarterback during a matchup against the Tampa Bay Buccaneers. Check out what Seau has to say about sports and fitness in an All Hands exclusive on Page 2. Photo by Paul Spinelli.

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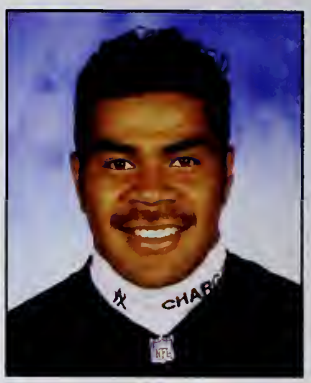
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ALL HANDS Exclusive

Seau says how



San Diego Chargers Linebacker Junior Seau talks to Sailors about fitness and mental preparation

There are many demands that are put on every person to do his or her job. In my sport of professional football, staying fit is one of the most demanding things I do.

It begins with determination, pride, drive and the ability to work within one's self. And in the Navy, I know preparation for the physical demands are of significant importance.



Weight training is one of my passions. I take it very seriously. I want to be the best at everything I do. Therefore, the time I put into strength training is as important as if I was making a game-winning tackle. I know firsthand that weight lifting will reduce the risk of serious injury. It allows me to develop and maximize the strength of all parts of my body and has prolonged my career. It makes me the best linebacker I can be everyday I walk on to the field, whether it's for practice or games.

I have seen how hard each one of you work. Every day is a game day for you. If I can give you one piece of advice, use that weight room whether you're on land or sea. It will prepare you for the physical demands that are required to stay at the top.

When it comes to the mental preparation for football, like the Navy, studying your opponent is of utmost importance. I take this very seriously. I'm always looking at game videos of the opposing offenses and the people I might have to face on Sunday. I study what they do in certain situations.

For example, our opponents may align themselves in a certain formation in a given situation and perhaps tip a play. At that point, it is up to me to recognize it and try to put our defense in a position so we can aggressively attack and win the battle on that play. I usually will look at the opponent's last four or five games to become familiar with what their coaches are thinking as it relates to downs and distances.

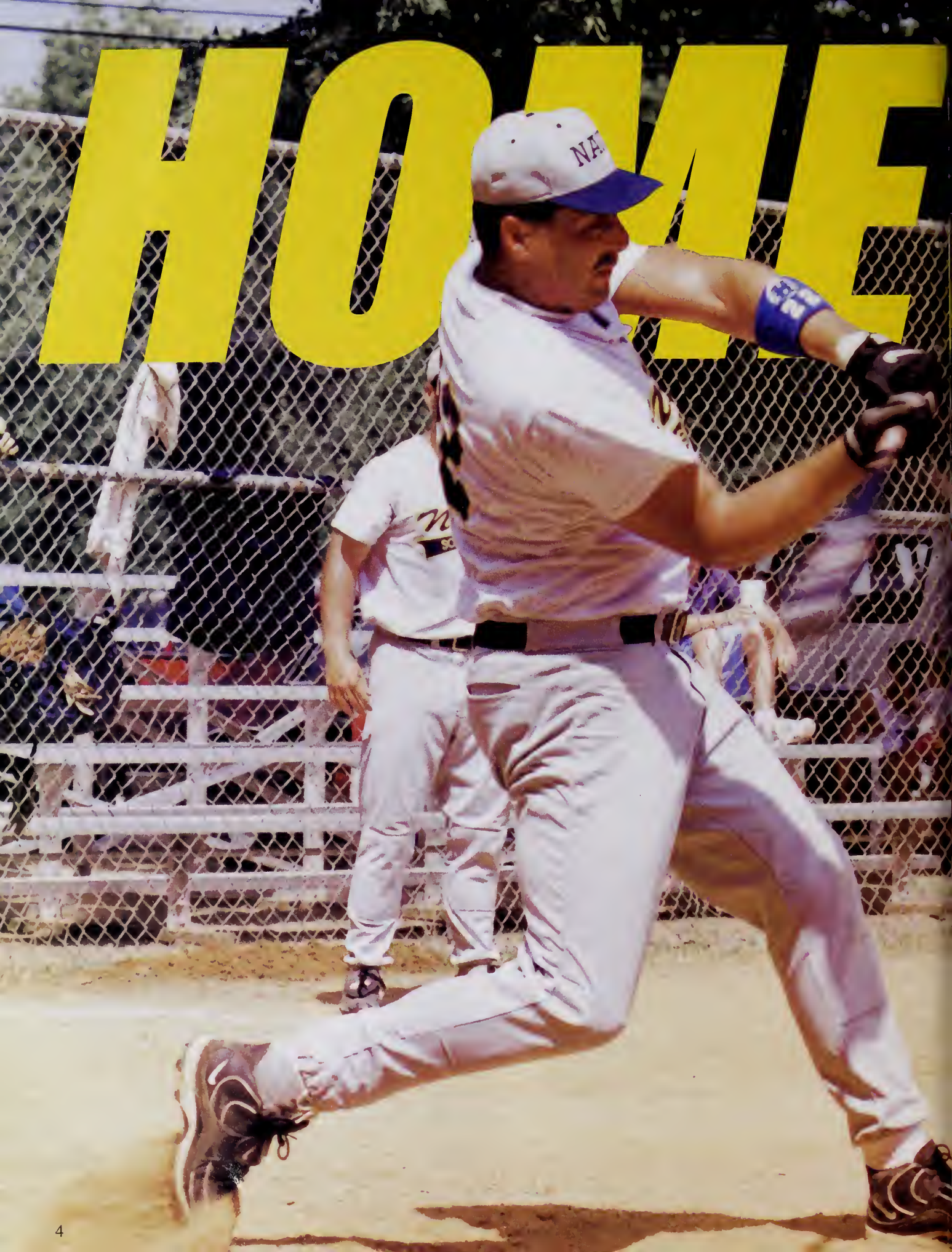
Before each game, as part of our preparation, our coaches put together a game plan and film. I study these and tie them in with practice each day leading up to gameday. All of this ensures I'm mentally familiar with both the opponents' and our own game plan before kickoff. By preparing this way, it gives me confidence. I know we have taken all possible measures to prepare ourselves for our rivals on Sundays at 1 p.m.

I wish all of you the best of luck in your careers and thank you for taking great pride in our country! ⚓

Seau is an all-pro linebacker for the San Diego Chargers. Photos courtesy of San Diego Chargers.



"When it comes to the mental preparation for football, like the Navy, studying your opponent is of utmost importance."
- Junior Seau


HOME

RUN!

Navy Sports goes DEEP

Story by JO2 Jeremy Allen

Do you eat, drink and breathe sports? Is finding the gym or joining a league the first thing you do when you arrive at a new command?

Well, whether you're an accomplished athlete or just like the idea of competing, the Navy Sports Program (NSP) may be the thing for you.

The NSP is an extension of the base-level sports program. "It gives top athletes who compete in intramurals the opportunity to compete beyond that level," said John Hickok, director of the program. "In some instances it gives them the opportunity to compete beyond the regional level, and even allows some people to go on to Armed Forces competitions, both nationally and internationally."

Any active-duty Sailor or member of the selective reserve may participate in the NSP, which has 14 sports teams that compete at the college level and above. Sailors can start at the intramural level and work their way to an All-Navy team, but prior experience at the base level is not required.

To try out simply visit your base's athletic director and request an application. "When filling it out, talk about specific events and names of references that NSP can check on," said Hickok. "The best references are those people who have played on an



All-Navy team in that sport."

Every application is reviewed, regardless of the Sailor's background and experience. "To be competitive you really need to be playing all the time at some level to maintain your skills," said Hickok. The lucky ones will be offered a trip to training camp, where they will be evaluated by the coaching staff.

Those who make the cut will represent the Navy at the Armed Forces Championship. At the conclusion of the tournament, officials will select an all-star team which will go on to the national championships or the Conseile International Du Sports Militaire (CISM), which is an international military championship second in size only to the Olympics.

The cost of sending athletes and their coaches to these events is covered by the Bureau of Naval Personnel. "There is no out-of-pocket expenses for commands to send one of their Sailors," said Hickok. "It only really costs the command time when the Sailor is away at training camp."

Participating in the NSP takes a high degree of dedication and professionalism because, as with all Navy programs, being a Sailor comes first. NSP athletes must balance their everyday duties with a demanding practice schedule. But, NSP gives Sailors with an athletic talent the opportunity to use it — while on active duty.

So, if you've got what it takes to represent the Navy, visit your athletic director and pick up an application for the Navy Sports Program. Just do it!

SPORTS CALENDAR

The1998 Navy Sports Calendar began late last year with the Boxing Training Camp which concluded Feb. 9. Listed below are the remaining camps and championships sanctioned by the Armed Forces.

TRACK and FIELD		
Training Camp	No Camp	May 26-31
Armed Forces	Camp Pendleton	June 3-6
TRIATHLON		
Training Camp	No camp	July 27-Aug. 16
Armed Forces	NAB Coronado	Aug. 17-22
MEN'S SOFTBALL		
Training Camp	NAS Paxtuxent River, Md.	July 27-Aug. 16
Armed Forces	Ft Carson, Colo.	Aug. 17- 22
WOMEN'S SOFTBALL		
Training Camp	JRB Fort Worth, Texas	
Armed Forces	Ft Carson, Colo.	Aug. 17-22
GOLF		
Training Camp	No camp	Sept. 13-17
Armed Forces	NAS Pensacola, Fla.	Sept. 18-25
TENNIS		
Training Camp	NAB Little Creek, Va.	Aug. 1-21
Armed Forces	Fort Eustis	Aug. 22-25
SOCCER		
Training Camp	NAS Whiting Field	Oct. 26-Nov. 15
Armed Forces	McDill AFB	Nov. 16-21
MEN'S BASKETBALL		
Training Camp	NS Mayport	
Armed Forces	Charleston AFB	



HotLink

For more information on the Navy Sports Program call your local Athletic Director or check out www.mwr.navy.mil









Alana Blahoski



Forward, U.S. Women's Ice Hockey Team
Gold Medalist, 1998 Olympic Games
Nagano, Japan

Q What inspired you to get involved in hockey?

A "I watched my older brother play hockey when I was young, but Minnesota rinks are much too cold to be a spectator for an entire winter. Also, since I was already at the rink, my dad thought the best way to keep an eye on me was to have me on the ice. There's really nothing better than being a part of a team and reaching a common goal together."

Q What types of fitness/conditioning training do you use to prepare for your sport?

A "The best way to condition for ice hockey is to be on the ice every day, but since that isn't always possible, I do as much training as I can outdoors at high elevation — running, hiking, mountain biking."

I want Muscl

Information provided by

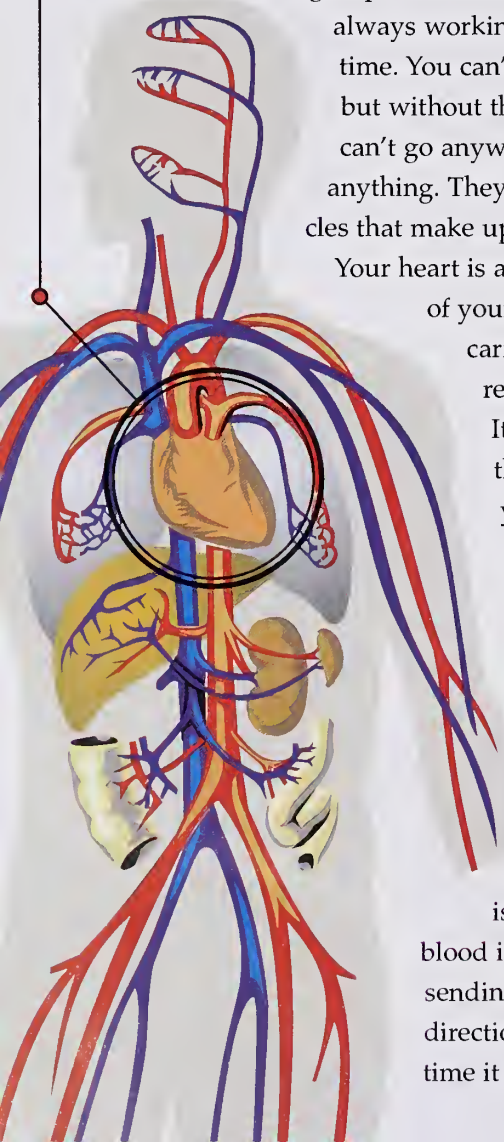


Bill Nye, the science Guy

The Heart

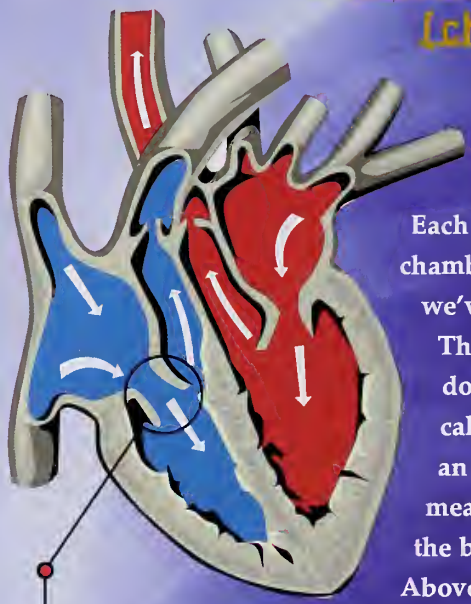


You have muscles all over your body that help you move around. Some of them you can control, like the ones in your arms. Some of them you can't, like the ones that make your stomach growl. But there's one group of muscles that's always working - all the time. You can't see them, but without them you can't go anywhere or do anything. They are the muscles that make up your heart.



Your heart is about the size of your fist and it carries a lot of responsibility. It's the pump that keeps you going and going, even when you sleep. Your heart pushes blood all through your body, and its job is to keep the blood in motion, sending it in two directions every time it beats.

The Heart's Rooms (chambers)



To send blood two ways at once, your heart has two sides. Each side has two parts or chambers. Altogether we've got four chambers. The two big chambers down at the bottom are called ventricles, from an old Latin word that means "belly." These are the bellies of your heart. Above each belly or ventricle, is a chamber called the atrium, from an old Latin word that means "main room." In olden days, when guests came into a house, the first room they visited was the atrium. When the blood comes back to the heart, it comes to the atrium.

The Gates (valves)

Now, to make the circulation work, your heart has valves, sort of like gates between the top and bottom chambers. Valves keep the blood flowing in one direction. Without valves, the pump won't work. It's a cycle. Every time your heart pumps, blood leaves your left ventricle and goes up to your system. Then it comes back to your right atrium and goes down to your right ventricle, then it's back up to your lungs and to your left atrium and then down again to your left ventricle. It happens all day, all the time.

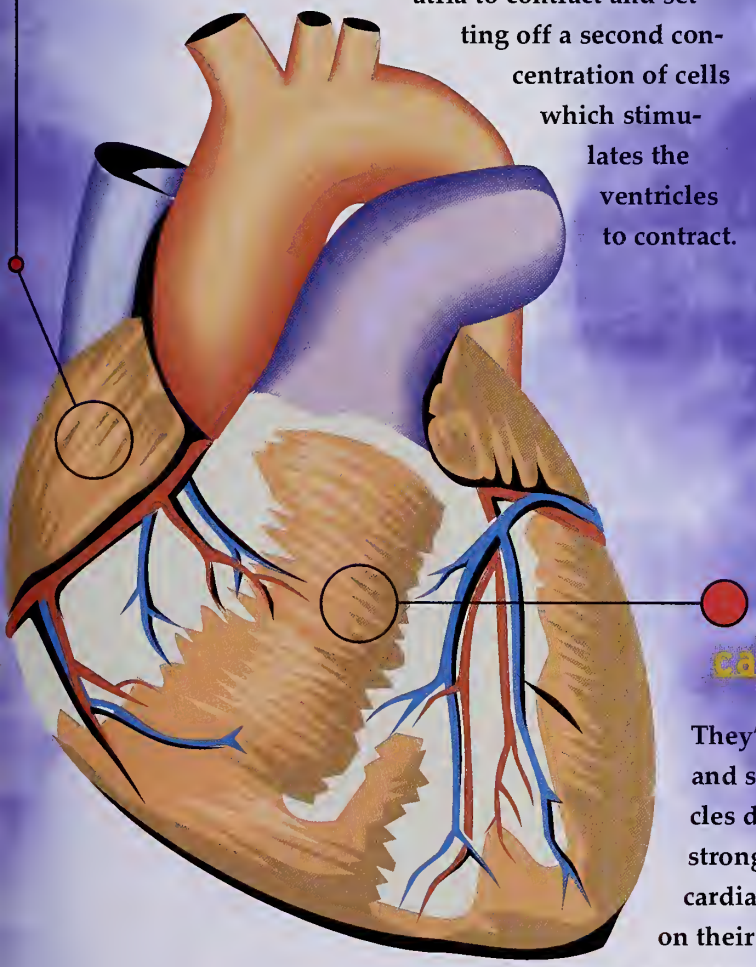
striated muscles



They're called striations or stripes. When these muscles move, they contract. They move together like pieces of tubing. Striated muscles are called skeletal muscles because they make your skeleton move.

sinoatrial (sine-oh-a-tree-al)

On the right side of your heart wall there's a patch of nerves that sends an electrical signal to your heart and makes it pump, pump, pump - all day and all night. These nerves are your natural pacemaker, or your sinoatrial nerves. The pacemaker acts like spark plugs to ignite each heartbeat, stimulating the muscles in the atria to contract and setting off a second concentration of cells which stimulates the ventricles to contract.



smooth muscles

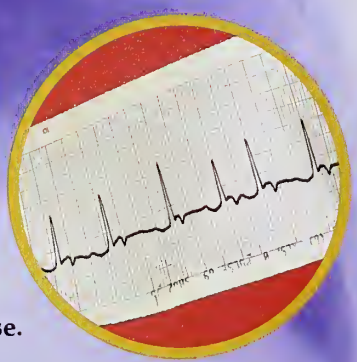


These muscles slowly contract. They can stay contracted a long time, but they don't pull as hard or as quickly as the powerful muscles in your arms. They hardly ever get tired and are as tight as a hose. Both smooth and skeletal muscles cells will contract only when our nervous system commands them to do so.

cardiac muscles

They're a combination of smooth and striated muscles. Heart muscles don't get tired, they're very strong and work naturally. Only cardiac muscles cells can contract on their own. They have the ability to start and transmit their own electrical impulses to contract.

the pitter-patter (beat)



The normal heart beats anywhere from 60 to 100 beats per minute while at rest. For example, when you're sleeping, your body doesn't need as much oxygen, so your heartbeat is lower. But when you're scared, excited or doing intense exercises, your heartbeat speeds up. It's your body sending a message to your heart saying, "pump more blood." Scientists call this "the fight or flight" response.





exercise

You can make your heart muscles stronger by exercising them. So try walking, running, jumping, hiking, diving, leaping, swimming or riding a bike. When you do intense exercises, the heart pumps much faster and squeezes about seven times as much blood all around the body. When you're sitting or squatting, blood is still being pumped to your brain by your heart. If you stand up real fast, some of the blood stays down in your legs and your feet and you can feel light-headed or even faint — like when you're on a roller coaster.



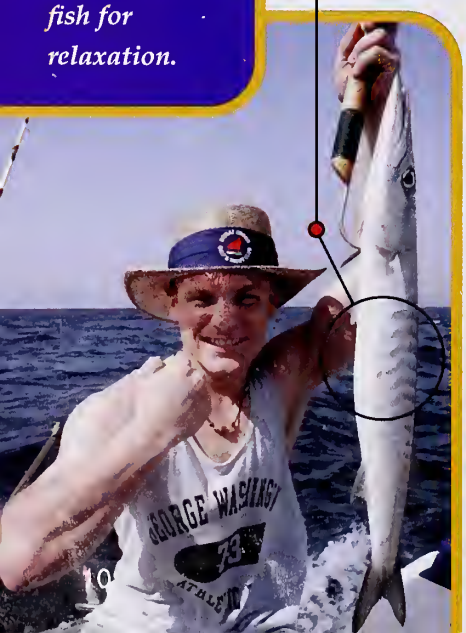
eating

Eating too much makes us gain weight and gain body mass. And then your blood has to travel a lot further every time it pumps around your body.

One way to lessen your body fat is to watch what you eat and count those grams of fat and calories.

We all need some fat. We've got fat in our feet, hands, nerves and brains. Even our heart has a little fat padding around it. But too much fat, especially animal fat, can be bad. Watch out for the greasy french fries, cheeseburgers, butter, ice cream or bacon because this stuff can end up inside your blood vessels. Eat foods like vegetables, beans, grains and non-fat dairy products. They're all foods without a lot of fat and they're easy on the heart.

83% of anglers fish for relaxation.



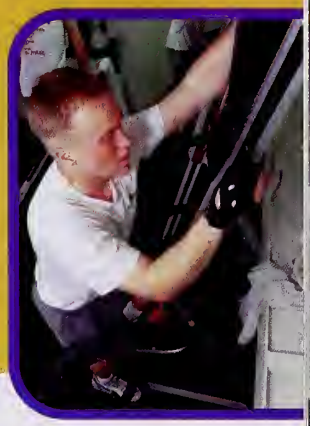




"I'm thinking about exercises to strengthen my heart muscles."

overweight

When you're overweight, your heart has to work harder. You need more oxygen and energy to move around, so your heart has to pump more blood. Try this test: Jump rope for about a minute and then check your heart rate. Next, put about 10 extra pounds in a bookbag and strap it on. Start jumping rope. Test your heart rate again. It should be faster than it was before.



injuries

Normally your blood flows right through your blood vessels, like water through a pipe. Every once in a while, you might injure yourself, so your blood vessel springs a leak. When that happens, you see blood. Your blood carries special proteins that stick to the sharp cut edges of your torn vessel and form a blood clot. This type of blood clot is good because it helps your body to heal. If you happen to have a large deposit of fat and the blood clot sticks to the fat, then your blood can't flow freely through your vessel and everything gets jammed. It sets off a chain reaction. The muscles downstream can't get enough oxygen. If it happens to be a blood vessel leading to your heart, it can give you a heart attack. Blood clots can be bad, so don't take in too much fat or cholesterol.



Heart Factoids:

- Is as big as your fist.
- From birth to old age, the heart beats about 2.5 billion times.
- Weighs less than one pound
- Your heart is a busy pump linked by 100,000 miles of pipeline to all parts of the body.
- Beats about 70 times a minute, and more than 100,000 times in a single day.
- Pumps 5 quarts of blood through its chambers every 60 seconds.
- Does enough work in one hour to lift a weight of 1 1/2 short ton off the ground.



Compiled by Patricia Oladiende, a staff writer assigned to All Hands.



Navy Corpsm TRIPLE



Story by JO2 Rich Henson and photos by PH2 Ted Banks

Whether he's racing to save lives in the emergency room or racing against the clock on the track, in the pool or on the road, Hospital Corpsman 3rd Class (Fleet Marine Force) Harold K. Montford takes his work seriously.

For the 24-year-old Sailor and triathlete from Panama City, Fla., staying competitive means staying in shape.



Montford's dedication and commitment to physical fitness earned him the distinction of being named 1997 Armed Forces Athlete of the Year.

Montford's competitive resume is impressive: gold medal, 1997 Conseil Internationale du Sport Militaire World Championship, Karachi, Pakistan; gold medal, 1997 Torii Station Triathlon, Okinawa, Japan; bronze medal, 1997 Armed Forces Triathlon, Camp Lejeune, N.C.

Montford's desire to stay competitive keeps him in top physical form. "I just like to compete. Setting goals and reaching them is like a natural high for me."

Montford's day begins at 5 a.m. with a pre-dawn run before reporting for duty. After lunch he hits the pavement on his custom-built racing bike and his evenings are spent swimming laps or lifting weights.

Such an intense workout schedule burns a lot of energy, so proper diet is one thing Montford never compromises. "I'm a big believer in nutrition. I supplement my diet after each workout, so my muscles have the protein they need to repair

n is a
THREAT!



themselves."

Preparation and planning play a big part in Montford's life, whether it's on the job or in competition. "Goal setting is as important to success as hard-work. Not only do you have to be physically prepared, you have to be mentally ready as well. Set your goals high and go for it."

Montford believes strongly in the benefits of good physical fitness and a healthy lifestyle, especially in relation to the daily rigors of the naval service. "Being in the military, you never know what you might be asked to do. So everyone should be physically ready. We are also under a lot of stress and exercise is the perfect way to deal with it."

Though Montford has met many of his personal goals for 1997, he is quick to point out that the best is yet to come. He has his sights set on the ultimate goal, Olympic Gold in 2000! Every day of training brings him closer to his dream of a trip to the Summer Games in Sydney, Australia. "They say 'Dreams are only limited by your imagination,' and I dream about the Olympics every night so don't count me out." ⚓

Henson and Banks are assigned to the Navy Public Affairs Center, San Diego





Rai

Story by
PHAN Lena Gonzalez

The year was 1976 and Olympic world-class Decathlete Bruce Jenner had just won the gold medal at the summer Olympics in Montreal, Canada. A young girl from Bakersfield, Calif., watched on a small television as he took his historic victory lap, the U.S. flag draped over his shoulders. It was at that moment she knew. She would one day be a part of the Olympic dream.

"I didn't know how. I didn't know when. I didn't know what I was going to do, but I was going [to the Olympics]," recalled LTJG Christine R. Stancliff, now working as a physical education instructor and assistant track-and-field coach at the U.S. Naval Academy, Annapolis, Md.

Stancliff, selected 1997 Navy Female Athlete of the Year by the U.S. Military Sports Association, owes much of her success in athletics to her naval experience. "I firmly believe that being in the Navy has helped me. This is what I needed — the organization," said the 34-year-old athlete.

Stancliff has ranked in the

sing the Bar

top 15 for female javelin throwers in the United States since 1991 and placed 4th at the National Track and Field Competition in Sacramento, Calif., in 1995. She is currently ranked 5th in the nation and has qualified for a spot at the U.S. Olympic trials in 1996, despite beginning 1997 with knee surgery to remove a bone spur. With tremendous willpower and strength, Stancliff overcame incredible odds just to compete at the Armed Forces Track and Field Championship in Port Hueneme, Calif. But, she did far more than that. She captured a gold in the javelin, shot put and high jump, and a silver in the discus. In all, Stancliff earned 15 of the 17 points scored by the women's team.



Even with all her athletic achievements, Stancliff considers herself more than just an athlete. She is a role model for kids, volunteering in her spare time at the local 4-H Club.

1998 should prove to be an exciting season for Stancliff. First she will travel to Camp Pendleton, Calif., for the Armed Forces Track and Field Championship, then she'll compete at the U.S. Nationals in Baton Rouge, La., where she hopes to finish in the top three to qualify for the U.S. Olympic Team.

How does this Olympic hopeful feel about her future? She smiles as she remembers her childhood dream, which is so very close to becoming a reality. "I'm very excited, very hopeful and very positive." ⚓

Gonzalez is a photographer's mate for All Hands.

HEALTH HINTS

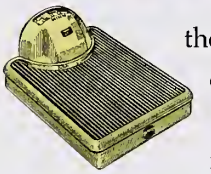




WEIGHT CYCLING - THE "YO-YO" PROBLEM

Hey! Get off that scale!

Carrying a few extra pounds of body weight may be less harmful than "yo-yo" dieting! The cycle of repeatedly losing and gaining weight can make weight management more difficult in the long run. It can also lead to poor self-esteem, eating disorders and heart disease.



Weight cycling often comes from quick-fix diets and other weight-loss gimmicks. The weight rarely stays off and when it comes back, it brings with it feelings of frustration and failure.

Without physical activity, each time the dieter sheds a few pounds, he or she loses lean body mass, along with body fat. When the diet ends and the pounds go back on, they are mostly fat, which burns less energy than muscle. Each time the cycle repeats itself, the dieter finds it harder to lose weight. And the pattern of "failure, success, failure" can really do a number on the psyche, making it harder and harder to try again.

If the repeated ups and downs of dieting describe your weight problem, shift your approach to management. You can break the cycle. Go for long-term changes, rather than short-term fixes. Change what you eat, the way you eat, your activity level and your lifestyle. It's the only way to be healthy—for life.



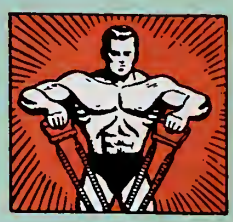
Body Composition: Fit, Not Fat



For athletic performance, your body composition may be more important than your weight, unless you compete in a weight category. That's true even if you're not an athlete. Health risks go up as the proportion of body fat increases. A lean, muscular body has benefits beyond athletics and good looks—it's a quality of overall fitness.



For non-athletes, body fat levels of 15 to 18 percent for men, and 20 to 25 percent for women are considered acceptable. Body fat levels below 4 percent for men and 10 percent for women suggest an eating disorder. According to the Institute of Medicine, obesity is defined as more than 25 percent body fat for men and more than 30 percent for women.



What's healthy for athletes? Male athletes typically have body fat values of 5 to 12 percent; female athletes, 10 to 20 percent. The difference depends on the sport and position within a specific sport.

If you want to know your body composition, check with a trained health professional. Health professionals use specialized techniques, such as skinfold measurements, underwater weighing and bioelectrical impedance (done with a computer). You can't get an accurate body fat measurement on your own.



10 Every Day Ways to Get Moving!

Do you find it difficult to fit 30 minutes of physical activity into your day? Here's 10 ways you can boost your fitness level just by doing every day activities with a little more vigor. Most take little, if any, extra time and they will all get you moving!



1. Take the stairs! Why use the elevator or escalator when walking up stairs is a great heart exerciser and calorie burner!

2. Park at the far end of the parking lot. Get off the bus a stop ahead. Walk to work or ride a bike.

3. Walk around your building during your lunch hour or coffee break. You'll burn energy rather than being tempted to nibble on a snack.

4. Push your lawn mower instead of using the power-assisted drive. Skip the snow blower; shovel your sidewalk by hand.



5. Plant a garden. Grow fresh vegetables and herbs if you can. In the fall, rake leaves.

6. Don't be a couch potato! While you watch television, do household chores or projects: mop the kitchen floor, refinish a piece of furniture or workout.



7. Clean the house. Wash the windows, vacuum or shampoo the carpet, scrub the bathtub, clean out the garage or basement, sweep the sidewalk. You'd be surprised how good a sweat you can work up doing chores around the house.

8. Forget the drive-through carwash. Wash the car yourself. You'll burn calories and save money!

9. Are you a computer user? Allot yourself at least five minutes of exercise for every hour spent at the keyboard.

10. Plan an active family vacation or weekend outing. Don't just sit on a beach! Go canoeing, hiking or snow skiing.



GOOD EATS!

Healthful, No-Cook Snacks for Kids and You!



Do you or your kids have a case of the after-school munchies? Try these healthful, no-cook snacks. They're easy and fun to make, and depending on your child's age, require little or no adult supervision.

Snack Kebobs. Cut raw vegetables or fruit into chunks. Skewer them onto thin pretzel sticks. *(Hint: To prevent discoloration, dip apples, bananas or pears in orange or lemon juice after cutting.)*

Veggies with Dip. Cut celery, zucchini, cucumbers or carrots into sticks or coins. Then dip them into prepared salsa or lowfat dip.

Banana Pops. Peel a banana. Dip it in yogurt, roll it in crushed breakfast cereal and freeze.



Fruit Shake-Ups. Put 1/2 cup lowfat fruit yogurt and 1/2 cup cold fruit juice in a non-breakable, covered container. Make sure the lid is tight. Then shake it up, and pour into a cup.

Pudding Shakes. Use the same technique for making fruit shake-ups, but instead mix 1/2 cup cold milk with 3 tablespoons of instant pudding.



Sandwich Cut-Outs. Using cookie cutters with fun shapes—like dinosaurs, stars and hearts—cut slices of cheese, meat and whole-grain bread. Then put them together to make fun sandwiches. Eat the edges, too.

Peanut Butter Balls. Mix peanut butter and bran or corn flakes in a bowl. Shape them into balls and roll them in crushed graham crackers.

Ice Cream-Wiches. Put a small scoop of ice cream or frozen yogurt between two oatmeal cookies or frozen waffles. Make a batch of these sandwiches ahead, and freeze them.

Ants on a Log. Fill celery with peanut butter or cream cheese. Arrange raisins along the top.

5 Great Ways to "Fiber Up!"

Are you eating the daily recommended 20 to 35 grams of fiber? If not, these five hints will help you to "fiber up!"

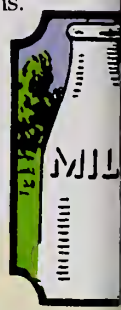
1. Eat at least five servings of fruits and vegetables daily. Apples, bananas, carrots and celery make great snacks.

2. Remember breakfast! It's a great time to eat fiber-rich foods. Check food labels for cereals with five or more grams of fiber per serving. You can top off your bowl with fruit for a little extra fiber.

3. Switch to whole-grains. Making sandwiches on a variety of whole-grain breads adds taste and fiber to your diet. Breads with whole grain include cracked wheat, oatmeal, pumpernickel, rye, whole-wheat and even cornbread made from whole, ground cornmeal. Eat breads made with bran, too, such as bran muffins.

4. Eat high-fiber snacks. Popcorn, fresh fruit, raw vegetables and nuts all have lots of fiber.

5. Enjoy fruits and vegetables with the skin on. With the skin, a medium potato has 3.6 grams of fiber. Skinless, it has only 2.3 grams.



Milk, Yogurt & Cheese Group
2-3 SERVINGS

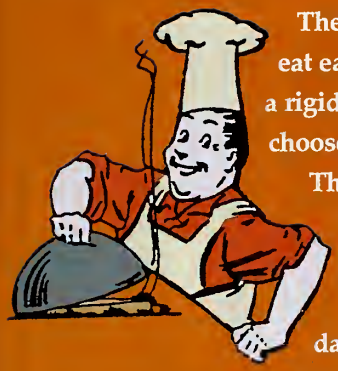


Vegetable Group
3-5 SERVINGS



Breads, Cereal, Rice & Pasta Group
6-11 SERVINGS

The Food Guide Pyramid:
A GUIDE TO DAILY FOOD CHOICES

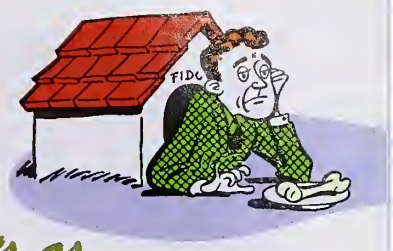


The Food Guide Pyramid is an outline of what to eat each day based on the Dietary Guidelines. It's not a rigid prescription but a general guide that lets you choose a healthful diet that's right for you.

The Pyramid calls for eating a variety of foods to get the nutrients you need and the right amount of calories to maintain healthy weight.

Use the Pyramid to help you eat better every day...the Dietary Guidelines way. Start with plenty of breads, cereals, rice, pasta, vegetables, and fruits. Add 2-3 servings from the milk group and 2-3 servings from the meat group. *Remember to go easy on fats, oils, and sweets, the foods in the small tip of the Pyramid.*





What Counts as One Serving?

The amount of food that counts as one serving is listed below. If you eat a larger portion, count it as more than 1 serving. For example, a dinner portion of spaghetti would count as 2 or 3 servings of pasta.

Be sure to eat at least the lowest number of servings from the five major food groups listed below. You need them for the vitamins, minerals, carbohydrates, and protein they provide. Just try to pick the lowest fat choices from the food groups. No specific serving size is given for the fats, oils, and sweets group because the message is USE SPARINGLY.

Milk, Yogurt, and Cheese
- 1 cup of milk or yogurt
- 1 1/2 ounces of natural cheese
- 2 ounces of process cheese

Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts
- 2-3 ounces of cooked lean meat, poultry or fish
- 1/2 cup of cooked dry beans, 1 egg, or 2 tablespoons of peanut butter count as 1 ounce of lean meat

Vegetable
- 1 cup of raw leafy vegetables
- 1/2 cup of other vegetables, cooked or chopped raw
- 3/4 cup of vegetable juice

Fruit
- 1 medium apple, banana, orange
- 1/2 cup of chopped, cooked, or canned fruit
- 3/4 cup of fruit juice

Bread, Cereal, Rice, and Pasta
- 1 slice of bread
- 1 ounce of ready-to-eat cereal
- 1/2 cup of cooked cereal, rice or pasta

Information and graphics provided by the U.S. Department of Agriculture

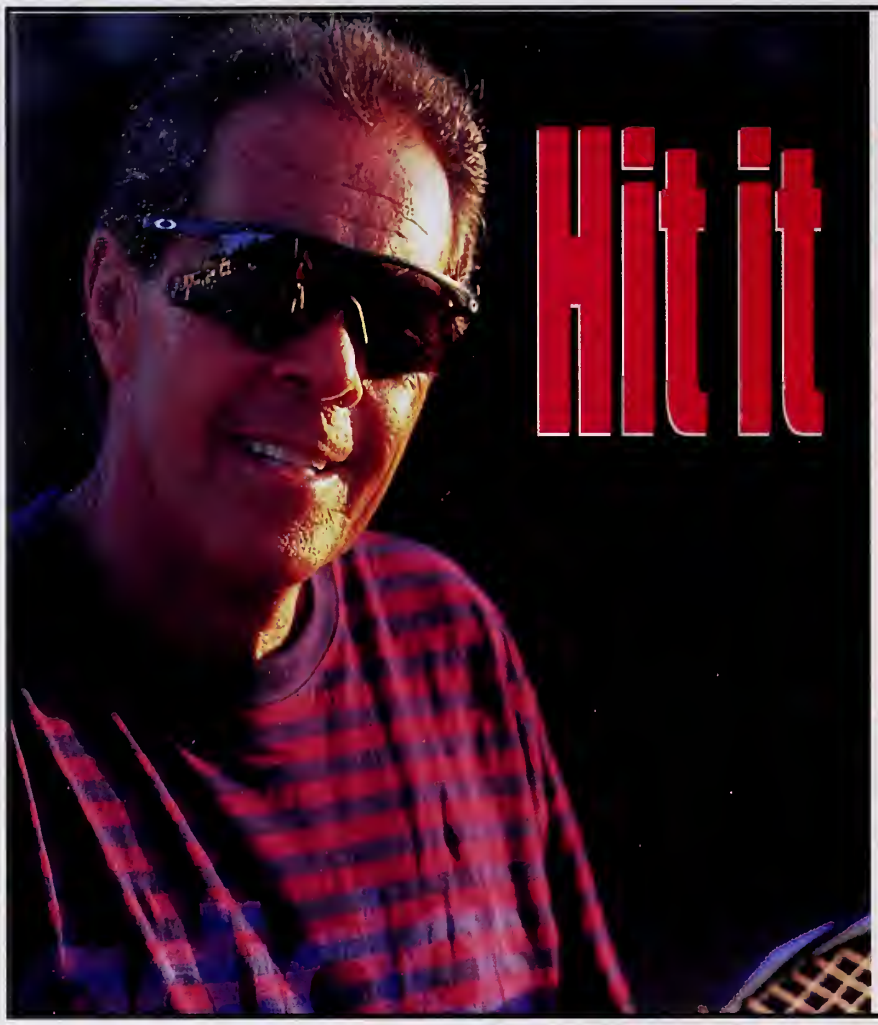


Photo by Iris Kraft

Hit it Hard

Fitness Strategies from Pro Tennis Coach Nick Bollettieri

Story by John Kirby

So, you want to get started on a physical fitness routine, eh? Not sure what to do? Well, it just might be easier than you think. According to professional tennis coach Nick Bollettieri, all you really need is enthusiasm and some good ol' fashioned "stick-to-it-iveness." "The key is making physical fitness a high priority in your life. You have to really want to do it"

And Bollettieri ought to know. He's been coaching professional tennis for more than 40 years. His list of students reads like a *Who's Who* in the sport: Andre Agassi, Monica Seles, Boris Becker, Mary Pierce, Tommy Haas, sisters Venus and Serena Williams and 1997 French Open winner Iva Majoli — just to name a *few*. At age 67, he remains incredibly fit, displaying an energy level sometimes unmatched by his teen-age players.

This is one man devoted to fitness.

"For your program to be successful, you have to attack it and stay devoted to it," said Bollettieri. "It can't be an on-again, off-again activity — you must be consistent. You must learn to coordinate your entire day and night activities, eliminating stress to a minimum."

To help you keep track of your progress, the coach recommends keeping a log of your daily activities. Write down what you did, how long you did it and even how you felt doing it. You're not always going to achieve your goals, but if you recognize that up front and log it, you'll be sure to improve in the long run. "Be sure to put down your ups and downs," said Bollettieri, "but most importantly, be truthful to yourself."

Setting realistic and personal goals is also very important said Bolletteiri. All the energy in the world will do you no good if you try to take on too much, stressed the coach. And what's worse — you could really hurt yourself. "As I say to all my

students on all levels of play, 'try to get a little better each day. Trying to do too much too [soon] will often bring disaster.'"

Your goals should also be tailored to your particular abilities. "Each person is different," continued Bollettieri, "and each person should have a program that is best for their needs."

Before beginning your program, Coach Bollettieri recommends getting a complete evaluation of your nutrition and mental needs.

"Take stock of those factors in your life that may play a big role in your overall fitness. Ask yourself: 'Are you eating well-balanced meals? Are getting enough sleep? How does stress on the job affect you?'

"Consider it all, because it's all important if you want to get fit and stay that way. You cannot leave one stone left unturned to be the best you can be," Bollettieri said with a smile. ⚓

Coming of Age

If you've ever wondered how the real pros get ready for a match, consider the efforts of Tommy Haas. At age 19, Haas is already ranked 36th with the Association of Tennis Professionals (ATP). That makes him the youngest professional player in the world so highly ranked. Haas has been playing tennis since the age of 8, but he readily admits that he didn't get this far through sheer talent alone. It's taken hard work — a lot of it. Professional tennis is brutally competitive, almost unforgiving. Haas trains hard because he has to.

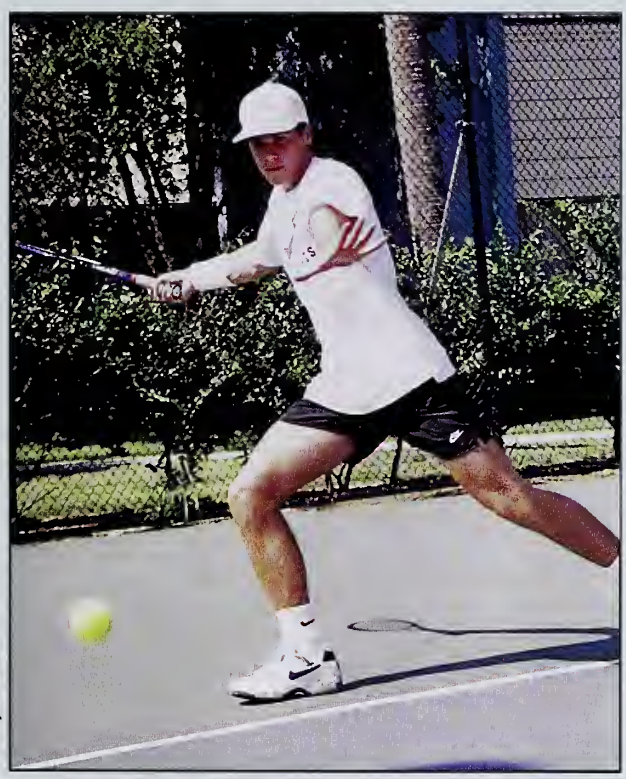


Photo by Iris Kraft

Tommy Haas follows a strict regimen, but he does alter it a bit depending on whether he's at a tournament or at home practicing.

Tournament Play

A good night's sleep is paramount. Tommy will always be in bed by 11 p.m.

His day starts with a complete and nutritious breakfast, followed by a brief, two- to three-hour warm-up period before playing. If he plays in the afternoon, he eats a very light lunch. Diet is critical. "I must watch my intake," he said, making sure sugar and other quick energy fixes are kept to a minimum. Practice sessions focus on timing drills, serving and returning serves.

Just before the match begins, Haas gets last minute advice from coach Nick Boliettieri while he skips rope. "Skipping rope is a must for me every day. It has really helped my movement," Haas said.

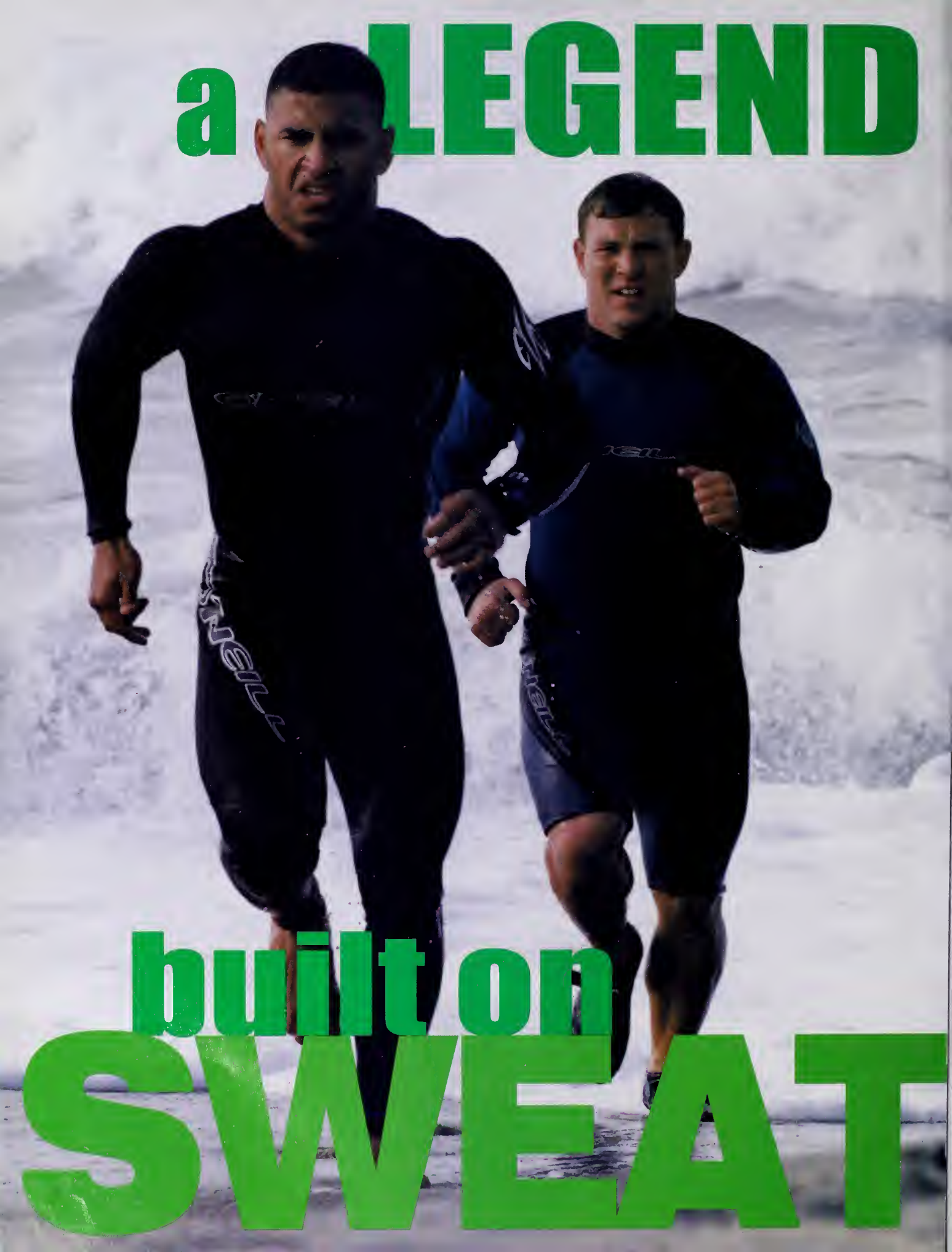
After the match, he gets a massage and prepares his strategy for the next match.

Practice

Haas attacks practice at his home base in Bradenton, Fla., with the same aggressiveness that he does during tournament play. "Even during practice days I stay up with my fitness program," he remarked.

A typical day for him includes two sessions on the court for a total of two hours, followed by an hour or two in the gym. Ample stretching is a mainstay of his routine, and again, he supplements the workout with skipping rope.

When time permits, he likes to relax by playing other sports as well. He enjoys basketball, skiing, golf and body surfing. ⚓

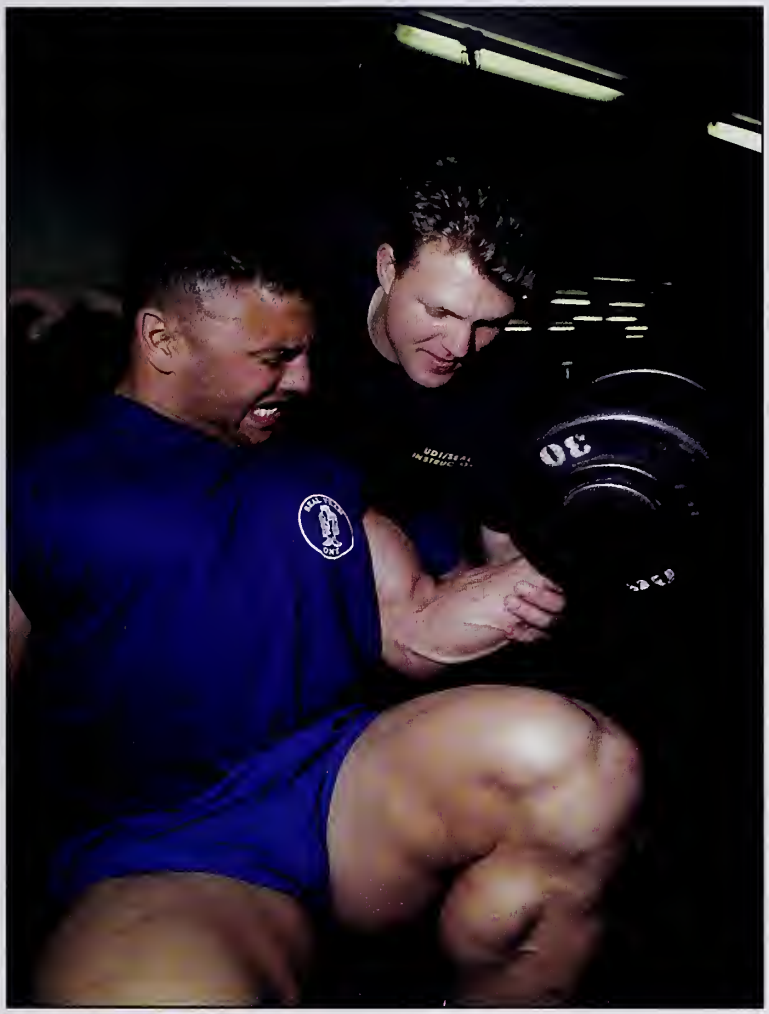

a LEGEND
built on
SWEAT

Story by JO2 Jason Emerson and Photos by PH2 Ted Banks

Navy SEALs have always been surrounded by a certain degree of mystery and intrigue. Their operations are top-secret, their members part of an elite fraternity. Best-selling authors and Hollywood producers depict them as ninja-like phantoms who appear out of the mist, strike, then vanish without a trace. As a result, SEALs are becoming the stuff of legend.

But behind the legend are Sailors. Sailors whose job is to go where no one else can. Sailors whose mental and physical toughness is forged by old-fashioned hard work and sweat.

Kory Knowles and Jeff J. Bramstedt know what it takes to be among the military's elite. Knowles, a boatswain's mate 2nd class from St. Petersburg, Fla., is a first-phase Basic Underwater Demolition/SEAL (BUD/S) instructor and Bramstedt, a hospital corpsman 2nd class from St. Louis, is a member of SEAL Team 1.



Knowles (right) guides fellow SEAL Bramstedt through another grueling repetition. Weight training, along with running, swimming and calisthenics, is an important element in a SEAL's total work regimen.

According to these veteran SEALs, a strict regimen of exercise, nutrition and rest is required to stay in top physical shape. SEALs are experts at all three. "SEALs train for endurance and strength," explained the 27-year-old Knowles. "The staples are running, swimming, calisthenics and weight training."

When not deployed, all SEALs participate in command-organized PT programs. Every morning they form up for an intense workout of push-ups, sit-ups, flutter kicks, lunges and eight-count body-builders followed by running, swimming or hiking.

Each SEAL also incorporates his own personal training program. Some follow a weight training program while others focus on a cardiovascular routine.

For Bramstedt, also 27, a large part of staying fit is putting the right fuel into the body. He believes good fitness is formed around a balanced diet.

"Nutrition is the key to making the entire fitness concept complete. It includes eating the right food at the right times," said Bramstedt, who has served five of his seven years in the Navy as a SEAL. "That means eating five to eight small meals per day to include the correct amounts of protein, carbohydrates and fats."

◄ HM2(SEAL) Jeff J. Bramstedt (left) and BM2(SEAL) Kory Knowles emerge from the water and charge the beachhead at Naval Amphibious Base Coronado, Calif.



▲ BM2(SEAL) Kory Knowles balances out his training program with a rigorous workout of weight lifting.

A component of nutrition many people overlook, but which is vital to SEALs, is hydration. According to Knowles, SEALs drink water continuously throughout the day. Proper hydration is as crucial to a good training regimen as discipline and the drive to succeed.

But neither good nutrition nor exercise will do any good without rest.

"When fatigue sets in, people are more predisposed to injury," said Knowles. "You need rest so that your body has an opportunity to recuperate and adapt to new stimulus."

Good fitness isn't exclusive to SEALs. "There are no secets to good fitness," said Knowles. "You just have to have a balanced program and the discipline to carry it out."

Books and movies may continue to build upon the legend. But every SEAL knows fitness and discipline are what get the mission done. For these warriors, legend isn't built on image, it's built on sweat. ⚓

◀ Basic Underwater Demolition/SEAL (BUD/S) candidates lug an inflatable boat along the Southern California shoreline as part of their physical readiness regimen. The acronym "SEAL" stands for Sea, Air and Land— the environments in which the commandos do business.

▼ YN2 (SEAL) Monte Jones of SEAL Team 1 stretches out at morning PT.





▲ Leg stretches help prevent leg injuries during workouts.

George Onyenyeonwu

(Onyen-ye-on) lives in the fast lane. Whether working as a surgical technician at Naval Medical Center, San Diego, or competing as a champion sprinter, this hospitalman is fast. And speed is what he'll need to reach his lifelong dream of running in the Olympics.

To get to Sydney, Australia, in 2000, the Nigerian-born Sailor will need to stay focused and healthy.

"You reap what you sow in track and field," he said "Unlike team sports, you're on your own out there. No one's going to carry you across the finish line."

Onyenyeonwu knows what it takes to succeed: discipline and determination. In the last year he has crossed the finish line first eight times. Gold is definitely his favorite color.

"Every time I win a race it gives me a tremendous feeling of satisfaction," said the 31-year-old athlete, who has been competing for more than 15 years. "The medals remind me of all the hard work I've done to stay competitive. Winning is a great motivator, but if I don't win, at least I know I gave it my best shot."

Soon the lean, 6-foot-1-inch sprinter will give it his best shot for a spot on the U.S. Olympic track and field team.

"It takes a tremendous amount of time and hard work to compete at the Olympic level." But, Onyenyeonwu knows he can make it if he keeps his intensity. "That's why I work out in the mornings before work and in the evenings after work."

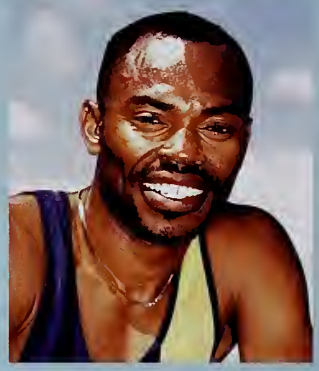
That kind of dedication and confidence is what Olympic athletes are made of. "When I say to people, 'See you in Sydney!," said Onyenyeonwu, "I really mean it."



Story by JO2 Jason Thompson, who is a photojournalist assigned to All Hands. *Photos by JO1 Joe Parker, who is a photojournalist assigned to the Naval Medical Center, San Diego public affairs office.*

"It takes a tremendous amount of time and hard work to compete at the Olympic level."

—HN George Onyenyeonwu



1997 Awards

April 5 Gold, Silver - 200m/100m **San Diego Invitational, San Diego**
June 20 Silver - 100m **Moving Shoes-All Comers, San Diego**
June 29 Gold (2) - 100m/200m **Trojan Masters, Los Angeles**
July 12 Gold (2) - 100m/200m, 4-man 100m relay **Western Regional Masters, San Jose, Calif.**
July 26 1st Place (2) - 100m/200m; 2nd Place Overall - 100m **SCA/USATF Summer All-Comers Grand Prix Championship, Long Beach, Calif.**
Aug. 9,10 Gold - 100m; Gold - 4X400m Relay; Silver - 200m **USATF National Masters Outdoor Track & Field Championships, San Jose, Calif.**

1998 Awards

Feb. 15 **Gold - 60m; Bronze - 200m Silver State Indoor Masters Classic, Reno, Nev.**

POW!!!



Elizabeth A. Evans trains six hours a day, six days a week, but it took less than two hours to walk into Kailua High School, take care of business and walk out the Hawaii Featherweight Tae-Kwon-Do Champion.

A 12-year veteran of tae-kwon-do, Hospital Corpsman 1st Class Evans has racked up 31 medals since she began competing in 1992.

The Seattle native has a lighting-swift kick and a work ethic that is legendary among her peers. "If you don't practice, you don't win. My skills may be off, but my conditioning has to be top notch."

After narrowly missing an Olympic berth in 1992, she is more determined that ever to bring home the gold in 2000.

For Evans, it is a dream well within reach. By dropping weight, competing and winning at the featherweight division, Evans has, in effect, doubled her chances of making the Olympic team that will travel to Sydney, Australia, in 2000. "When it comes to the Olympic trials, I will have wild cards in two divisions. So, depending on which division is looking good for me, that's the division I can go with."

"If you don't practice, you don't win."

—HM1 Elizabeth A. Evans

Whether working special projects at Administrative Services Department at Naval Medical Clinic, Pearl Harbor, or delivering spinning-hook kicks to an opponent's head, Evans formula for success remains the same.

"Being in the military, you need to be organized," she said. "That carries over to tae-kwon-do as far as organizing the training and knowing what I need to get done to win."

For now, Evan's training schedule will be geared to get her ready for the U.S. National Tae-Kwon-Do Championships. If all goes well, Evans will represent the United States at the 1998 Goodwill Games in New York City this July.

A victory at the Goodwill Games could secure Evans a spot on the 2000 Olympic team.

"You have to be serious about your training," she said. "You have to want it so bad you can taste it. There's nothing like standing on the podium hearing your National Anthem being played. That's what motivates me." ⚓

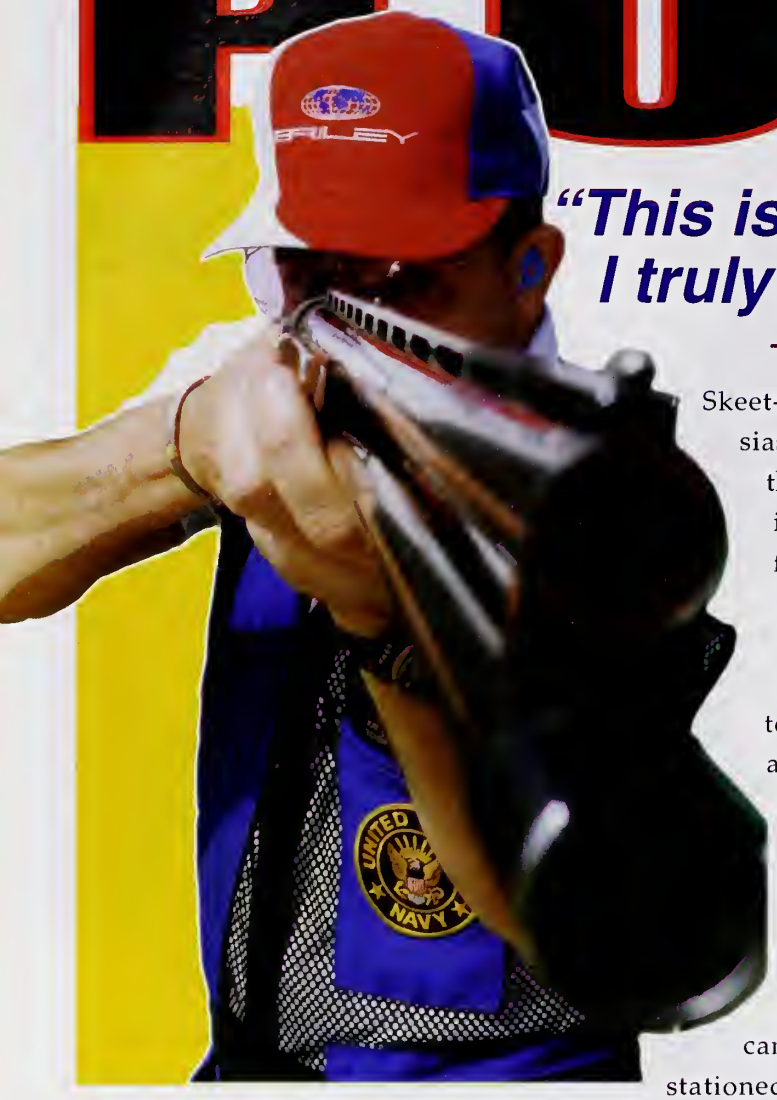
Story and Photos by PH1 William R. Goodwin, who is a photojournalist assigned to Hawaii Navy News.



Significant Achievements

1996 World Cup, Rio de Janeiro, Brazil - Gold Medalist
1996 U.S. National Tae-Kwon-Do Championships, Colorado Springs, Colo. - Gold Medalist
1996 U.S. National Team Trials, Colorado Springs, Colo. - Gold Medalist
1996 Pan American Tae-Kwon-Do Championships, Havana, Cuba - Gold Medalist
1996 C.I.S.M. World Military Tae-Kwon-Do Championships, Pula, Croatia - Silver Medalist
1996 U.S. Olympic Committee Female Athlete of the Year (Tae-Kwon-Do)
1997 U.S. National Tae-Kwon-Do Championships, Oakland, Calif. - Gold Medalist
1997 C.I.S.M. World Military Tae-Kwon-Do Championship, Rome, Italy - Gold Medalist

PULL



"This is a sport I truly love."

—FC1(SW) Jose Castillo

Jose Castillo is one of the top skeet shooters in the world and has the year 2000 Olympics in Sydney, Australia, dead in his sights.

Enter the Gun Club grounds aboard NAS Jacksonville, Fla., and you'll find yourself smack in the middle of a skeet shooting tournament.

The third day of the "Fish Fry Open" is a beautiful Sunday morning in March: sunny, pale-blue skies and not a hint of rain. Skeet-shooting enthusiasts from all over the country, including five former all-Navy skeet shooting team members, have come to test their skills against each other.

Fire Control Technician 1st Class (SW) Jose Castillo, a six-time all-American skeet shooter stationed at Shore Intermediate Maintenance Activity, Mayport, Fla., is one of them.

Between rounds Castillo remembered how it all began: "I realized I had potential when I was around 7 to 10 years old," said the Jacksonville native.

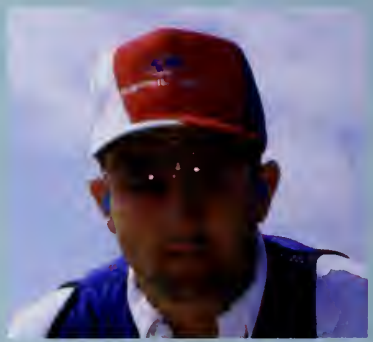
"It wasn't until 1993 that I realized I could compete with the elite shooters," he admitted. It was a break out year for him, highlighted by Florida and Virginia state championships and a world military championship.

"This is a sport I truly love," Castillo said. "It's a mental discipline. You've got to make every shot identical. It pushes me mentally and physically."

The 2000 Olympics is Castillo's ultimate destination, but he said it won't come easy. There are many qualifying tournaments during the next two years

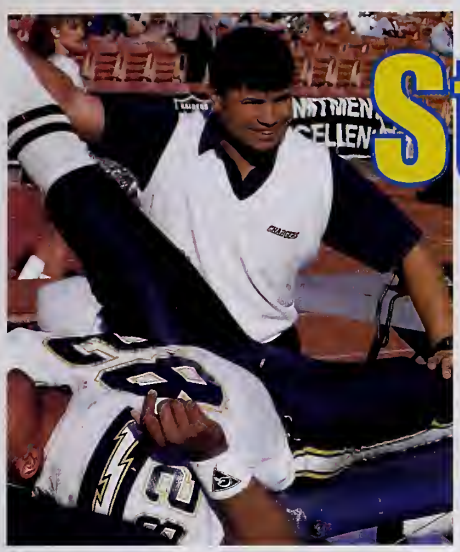
Even after his quest for Olympic Gold is over, Castillo promised he'll keep on shooting. "I'll do this forever," he said with a huge grin on his face. "Until I die or my eyes give out."

Story and photos by JO1(AW) Michael R. Hart, who is a photojournalist assigned to USS John F. Kennedy *(CV 67) public affairs office.*



Shooting down the competition

1992-1998 — Skeet shooting all-American
1993-1998 — Navy Skeet Team Captain
1993 — U.S. Open champion
1993-1994 — Virginia State champion
1993 — World Military 20 gauge runner-up
1994 — World Military 12 gauge champion
1994 — Tied Open and military 12 gauge World record (250x250)
1994 — Set new 12 gauge two-man team World record (500x500)
1996 — Armed Forces Active-duty World doubles champion
1997 — 12 & 28-gauge Military World Champion



Stretching Tips

By Keoki Kamau, Head Trainer for the San Diego Chargers

We all know exercise is important to stay slim and feel healthy. Many of you already exercise and walk regularly. When choosing an exercise routine, choose one that will benefit your health and that you will enjoy. Stretching is an important foundation to any exercise program.

There are many different stretches. But, only one way to stretch. Have fun, keep it simple, and until next time... Aloha.

Stretching Benefits

- Increases circulation
- Increases the elasticity of muscle
- Increases range of motion
- Enhances the warm-up phase
- Aids in the prevention of injury.

Stretching Tips

- Start slow
- Don't bounce
- Hold stretch position for 15 seconds
- Moderation is key
- Listen to your body, don't overdo it
- Stretch 10 to 12 minutes before exercise



Tony CLARK



First Base, Detroit Tigers

Q Why is staying fit so important?

A "In our line of work it is important for us to stay physically fit throughout the season. We need to be just as strong in August and September as we are in April and May. This also is true in our everyday lives."

Q What's the best type of program?

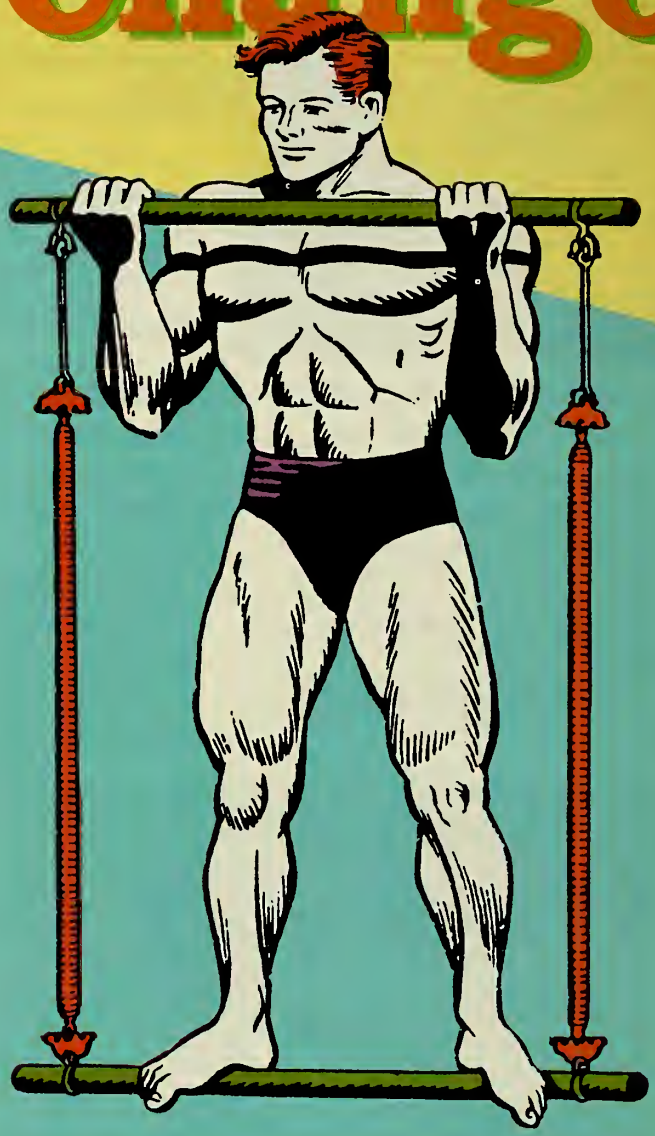
A "Find a program that's right for you. Have a specific program tailored to what your job is going to physically demand of you. STICK WITH IT!"



PRT Changes

Story by JO2 Thompson

The new physical readiness test (PRT) regs are out and will go into effect fleetwide in September. Sailors are still required to exercise at least three times a week; maintain a healthy lifestyle and good eating habits; and stay within height-weight or body fat standards. But, there are a few changes that every Sailor should know about.



Special PRTs

COs will now have the authority to grant certain Sailors special PRT follow-up tests. The tests will serve as a tool for approving or delaying a Sailor's promotion, residesignation or frocking.

Sit-reach

Failure on the sit-reach portion of the PRT will no longer mean an automatic failure. However, it will result in the Sailor being assigned to a command-directed physical training program emphasizing the importance of flexibility to overall health and fitness.



Faster Running Times For Women:

Run times for women ages 17 to 29 will be trimmed to more accurately reflect the age group's aerobic capacity. The following table summarizes the changes to the 1.5-mile run times:

(M=MEN, W=WOMEN)

	17-19 YRS M/W	20-29 YRS M/W	30-39 YRS M/W	40-49 YRS M/W	50+ YRS M/W
OUTSTANDING:	9:00/11:30	9:15/11:30	10:00/12:00	10:15/12:15	10:45/12:45
EXCELLENT:	9:45/12:30	10:30/13:15	11:45/13:45	12:15/14:15	12:30/14:45
GOOD:	11:00/13:30	12:00/14:15	13:45/15:30	14:30/16:15	15:15/16:45
SATISFACTORY:	12:45/15:00	13:45/15:45	15:30/17:15	16:30/18:15	17:00/19:00

Hit The Fleet



Body Fat/Height-Weight Changes:

Body fat standards for men will stay at 22 percent while women's will increase from 30 to 33 percent. The height-weight table will change for both sexes and will more closely reflect upper body limits for body fat. Overall, maximum allowable weights for both men and women will be reduced by several pounds.

Although height/weight tables only approximate body fat levels, they remain an effective screening tool. The following table summarizes the changes to the maximum allowable weights which will be used for PRT cycles conducted on or after Sept. 1, 1998. (e.g., ht/wt measurements taken in August 98 for a September 1998 will use the following table):

Weight for Height Table

Women—Maximum Weight in Pounds	Height in Inches	Men—Maximum Weight in Pounds
134	58	132
138	59	137
142	60	142
145	61	147
149	62	152
152	63	157
156	64	162
160	65	167
163	66	172
167	67	177
170	68	182
174	69	188
177	70	192
181	71	196
185	72	201
188	73	206
192	74	211
195	75	216
199	76	221
203	77	226
206	78	231
210	79	236
213	80	241

Pregnant Sailors:

Pregnant Sailors will now participate in an exercise routine approved by their physician (unless they are medically waived). They will continue to be waived from body fat requirements and PRTs during and six months after their pregnancy.



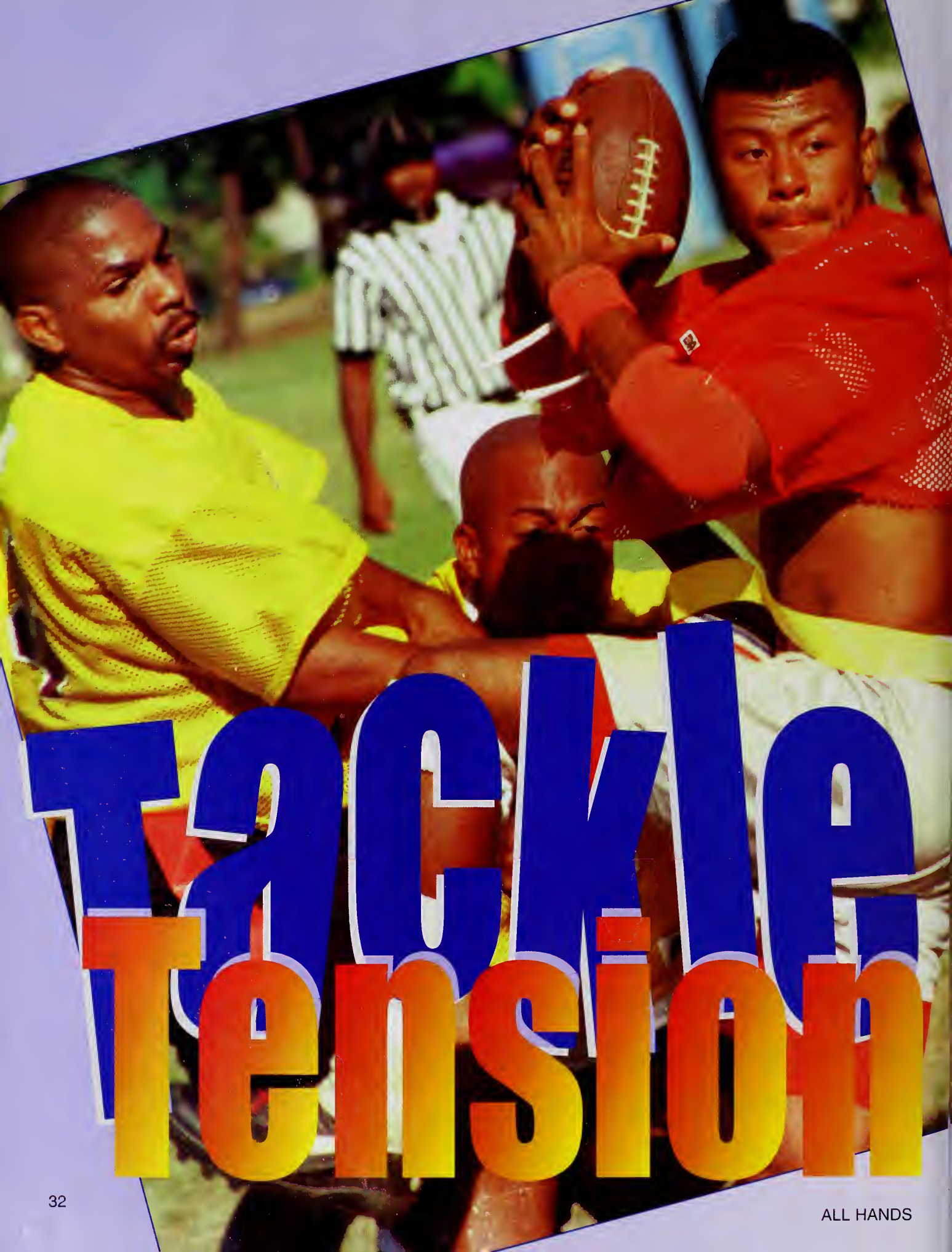
Mandatory CFC Certification:

Command fitness coordinators (CFCs) will have six months from the time they take the duty to go through a mandatory training certification process. The training will be conducted either via video teletraining or in person with a Navy fitness instructor. CFCs who were trained after January 1996 will be considered certified.

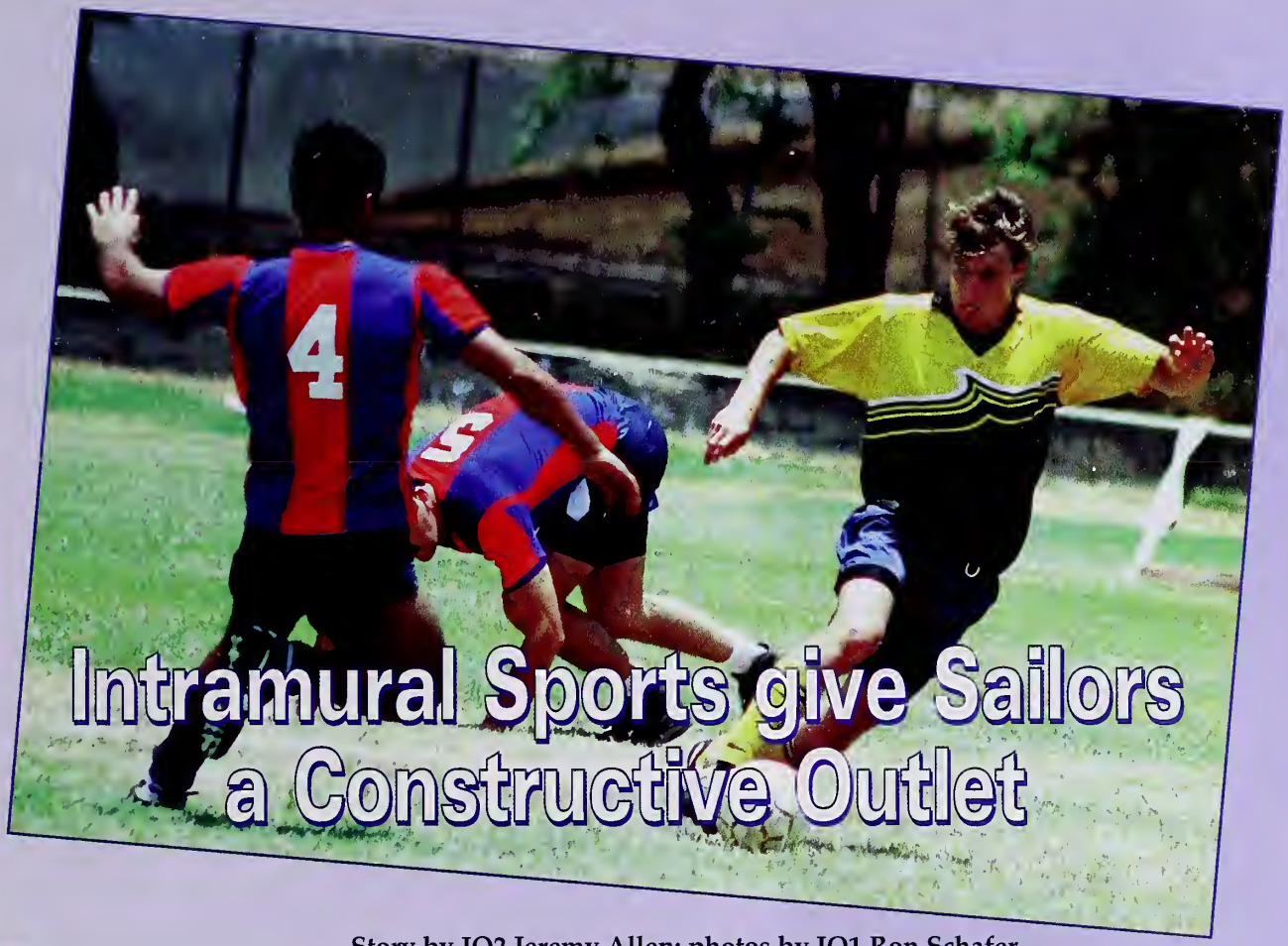
The new instruction **(OPNAVINST 6110.1E)** can be downloaded from the Navy Electronic Directives System (NEDS) web site at **<http://www.dodssp.daps.mil/usndirs.htm>** and via BUPERS Access (DSN: 225-6900).



Thompson is a photojournalist assigned to All Hands.



Tackle Tension



Intramural Sports give Sailors a Constructive Outlet

Story by JO2 Jeremy Allen; photos by JO1 Ron Schafer

With hectic operational schedules, time spent performing maintenance and necessary training evolution's, Sailor's are always pulling long hours. But when the day's work is over, Sailors need a place to unwind, have fun and let off steam.

One way to do this is by playing sports.

The Navy offers Sailors the opportunity to participate in off-duty recreation through the Navy Recreational Services Program in the form of intramural sports. The program is run by the local Moral Welfare and Recreation (MWR) Department.

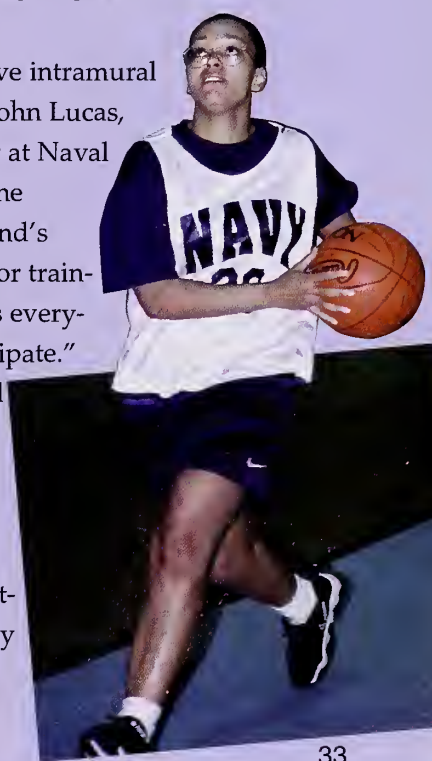
The mission of the intramural program is to provide a variety of good, wholesome recreational fun for Sailors and their families. This "outlet" allows them to maintain a high level of alertness, job effectiveness and physical well-being.

Throughout the fleet, MWR programs offer intramural leagues in events ranging from softball, basketball, bowling, golfing to racquetball, badminton, and sailboat racing.

With Sailors and their commands moving at a frantic pace, putting teams together can sometimes be a difficult job.

But commands and commanders are highly encouraged to support any recreational program that allows its members the chance to enhance morale and physical fitness.

One example of an effective intramural program is the one lead by John Lucas, the assistant athletic director at Naval Station Norfolk. "We tailor the schedule around the command's availability and operational or training commitments. This gives everyone the best chance to participate."



The idea of the intramural program is to get as many Sailors as possible involved. The program is set up to allow tenant commands as well as homeported and visiting ships to participate in any of the activities or start their own.



"The Sailors love it because it's up to them," Lucas said. "If they want to play 1,000 games and we have the funds and the gym space and another team that wants to play, we'll do that. It's nice to be able to give them that option."

The intramural program gives Sailors another option to increase their talent, motivation and skills. It not only conditions the body but also the mind.

"Playing sports in the Navy has helped get me to where I am today," said Hull Technician 1st Class (SW) Paul E. Clark of Shore Intermediate Maintenance Activity, Norfolk. "It helps me keep a sound mind and body, and it keeps me out of trouble."

Along with a little healthy competition and rivalry, the intramural program gives an outlet for Sailors to 'show their stuff' and compete with other shipmates. "We live for some of these rivalries," said Clark. "I enjoy the competition. Fighting for bragging rights against other ships and shore stations gets me excited. One of the things that really makes us play hard is when our fans come out.

"I really get into that," Lucas said. "A lot of the commands will have 40, 50 or 60 people coming out to watch volleyball, or softball, or basketball. It just raises the atmosphere to a different level. I think the players play a little harder because they know that their buddies or their commanding officer is watching them play. Those are the times when you step back and say, 'This is what the job is all about; this is why we do this.'"

Quit wasting time and join a team today.

Schafer is a Norfolk-based photojournalist for All Hands.



Mary Joe Fernandez



Mary Joe Fernandez,
International Tennis Star

Q What things has tennis brought to your life?

A "It has taught me discipline, a good work ethic, concentration and the ability to prioritize my time. Tennis has just brought so many wonderful things to my life — travel, friends and physical fitness."

Q What sort of regimen do you follow?

A "I play two hours in the morning and two hours in the afternoon with about an hour and a half of some sort of fitness training afterward — running sprints, footwork drills, bicycling, weight training or even long distance running.

Q How does staying fit benefit you beyond tennis?

A "I just feel so much better when I exercise. I have more energy and am more alert. For good overall health, any kind of exercise is great."

Going the DISTA



Story by JO2 Mark Savage, photos by PHAN Lena Gonzalez

When Sailors prepare to run, they usually set their sights on the biannual physical readiness test or a 5K or 10K run for charity. But for serious runners like Boatswain's Mate 2nd Class Michael J. Morton, these distances are just too easy.

"People seem to think a marathon is the ultimate racing distance, but it's not," said Morton, "There are people who run 1,000-mile country races. You just run and sleep."

He is referring to an event called the ultramarathon — the ultimate test of a runner's endurance.

Morton, assigned to the dive locker, Naval Station Annapolis, Md., began running long distances competitively while stationed in Diego Garcia in 1992. But it wasn't until he reported aboard USS *L.Y. Spear* (AS 36) in Norfolk in 1993, that he was exposed to ultramarathon running.

Morton never again looked at running the same way again. "I've run shorter distances, but I'm not that fast," Morton said. "But in races where endurance takes over rather than speed, I discovered I could be more competitive."

Morton finished his first ultramarathon in a time of 7 hours, 22 seconds, placing sixth for the 40-mile race.

Since then Morton has run in almost 30 races, including the "Flatlander 50" in Virginia Beach, Va., where he finished first in 6:36, and the "Old Dominion 100" in Woodstock, Va., where he tied for first with a time of 17:40 — that's 100 miles in less than 18 hours, or about 6 miles per hour.

"It's a great feeling of accomplishment after running 20-some hours to finish a 100-mile race," he said. "There's a million reasons to quit. But you somehow fight the urge and just finish. And that's the only reason to do it — to finish." ⚓

Savage is a journalist assigned to Naval Media Center and Gonzalez is a photographer assigned to **All Hands.**

ICE



Morton's Best Finishes

1997 **Western State 100**, California. 1st place 15:40 (course record)
1997 ***Trial Run across the Common wealth***, Virginia, 4-day 150- mile stage race 24:21
1997 ***Dances with Dirt 100K***, Michi gan, 1st place (course record) 8:54
1997 ***Rattlesnake 50K***, West Virginia, 3:41
1996 ***Massanutten 100K***, Virginia, 1st place (course record) 20:21
1996 ***National Trail 50K***, Texas, 3rd place 5:57
1996 ***General Nutrition Center 50K***, Pennsylvania, 2nd place 5:42
1995 ***Old Dominion 100K***, Virginia., 16:55
1995 ***JFK 50K***, Maryland. 6:08
1995 ***Vermont 100K***, 1st place, 14:08 (course record)

Mia Hamm



Captain, U.S. Women's Soccer Team
Gold Medalist 1996 Olympic Games, Atlanta, Ga.

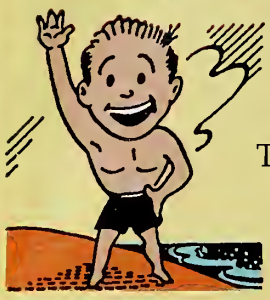
Q How important is teamwork?

A "It's the team that keeps me going. I have a role to create chances for my team to score and be there for them. They are the ones who help me get through the hours of training and hard work soccer requires. At times it seems it would be easy to quit, but when I look at them working hard I have to keep going — for my teammates and my love for soccer."

Q Soccer requires a lot of endurance as well as quickness. How do you train for such a demanding sport?

A "I stay fit with a mix of sprints and distance running. I sprint over a 40-yard course three times, rest 45 seconds and then repeat the set six times. I also run 3 to 4 miles once each week at a steady pace."

Health & Fitn



Are you the picture of health and fitness? Take this quiz to find out. Each question has only one correct answer.

1. How often should you wear your seatbelt?

a. 50 percent of the time

b. 100 percent of the time

c. Only while driving on base, because the guard at the gate won't let you in until you buckle up.

2. How much water should you drink everyday?

a. At least 32 ounces (4 glasses)

b. At least 64 ounces (8 glasses)

c. All you need is the 2 gulps you drink to take your vitamins and whatever you swallow while taking a shower and brushing your teeth.



3. What is the Food Guide Pyramid?

a. A calorie counter

b. A visual guide to help understand the foods we need, from what groups, and in what amounts

c. An Egyptian restaurant guide.

4. What is the best way to lose weight?

a. Skip meals frequently

b. Eat a well-balanced diet and exercise

c. Skip breakfast everyday, eat a "candy bar and soda" lunch, eat a huge dinner (you've earned it from starving yourself all day) and then get on the treadmill and run as hard as you can until you collapse.

5. What is the goal of the "5-A-Day" campaign?

a. To eat only five sweets per day

b. To eat at least five fruits and vegetables everyday

c. To limit the number of trips to the all-you-can-eat buffet to five.

6. What is the leading cause of preventable death in the United States?

a. Skin cancer

b. Smoking

c. Driving on the wrong side of the road with your headlights off.

7. What is considered low fat?

a. 10 grams of total fat per serving

b. 3 grams of total fat per 100 calories of a serving

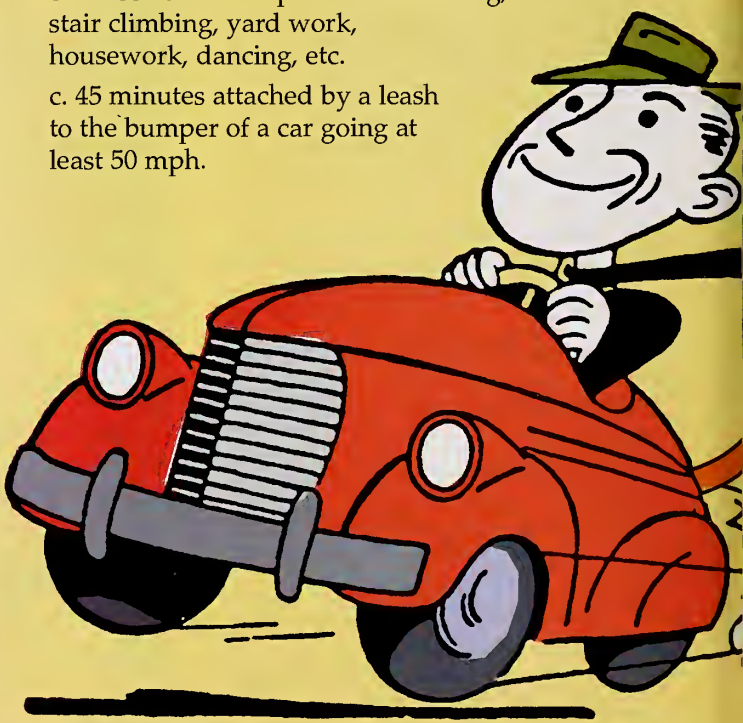
c. When a serving consists of no more than 50 percent fat. (That's "half the fat," right?)

8. How much physical activity per day do you have to do to improve your heart health?

a. One hour of aerobic activity

b. One 30-minute period, two 15-minute periods, or three 10-minute periods of walking, stair climbing, yard work, housework, dancing, etc.

c. 45 minutes attached by a leash to the bumper of a car going at least 50 mph.



ess Challenge



9. What is the best answer for effective ways to relieve stress?

a. Drink a moderate amount of alcohol

b. Regular exercise, balanced diet, deep breathing and meditation

c. Eat a whole bag of cookies, kick the dog and scream obscenities while stomping around the house slamming every door.

10. Which dessert is the healthiest choice?

a. A piece of chocolate cake with chocolate frosting

b. A frozen dessert with 3 grams of fat per 1/2 cup serving (such as sherbet, frozen yogurt, ice milk, popsicles or fruit bars)

c. A bowl of double fudge ice cream with marshmallow topping sprinkled with candies.

11. What is the best choice for lowering your cholesterol?

a. Don't eat any red meat or eggs

b. Eat less fat (especially saturated fat) and cholesterol

c. When adding butter to your popcorn at the theater, cut back to 10 squirts of butter instead of 15.



12. What is a safer alternative to cigarette smoking?

a. Pipes, cigars or chew

b. Quit smoking

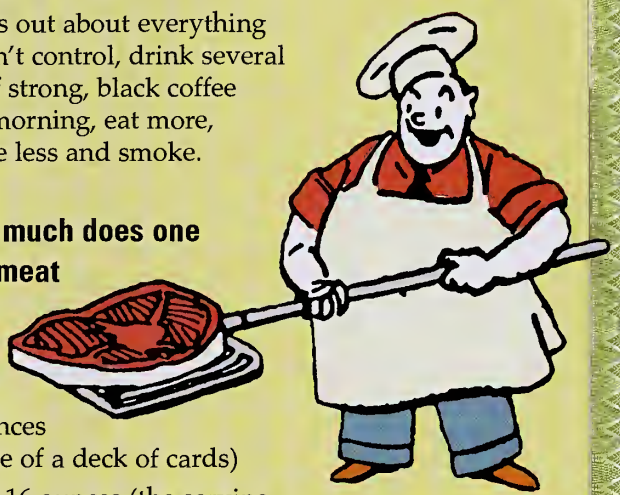
c. Wrap your lips around your car's exhaust pipe and practice deep breathing exercises.

13. What are some good ways to lower high blood pressure?

a. Take your blood pressure medication only when you feel bad

b. Exercise, cut down on salt and alcohol, lose weight

c. Stress out about everything you can't control, drink several cups of strong, black coffee every morning, eat more, exercise less and smoke.



14. How much does one serving of meat weigh?

a. 8 ounces

b. 3 ounces (the size of a deck of cards)

c. 12 to 16 ounces (the serving size from your favorite steak house).

- If you answered "B" for every question you are the picture of health. Congratulations on the healthy choices you make daily and keep up the good work. The odds of you living a long and healthy life are with you.
- If you answered "A" for any of the questions, keep trying. Take life one day at a time and vow each morning to make healthier choices throughout the day.
- If you answered "C" to one or more questions, and were serious, it is time to seek professional help.



Courtesy of the Naval Hospital Jacksonville Wellness Center, Jacksonville, Fla.

FIRE WHEN READY!

The Battle of Manila Bay

Story by John Kirby, photos courtesy of the Navy Historical Center

Early on the morning of May 1, 1898, an American naval squadron led by Commodore George Dewey slipped into Manila Bay and annihilated the Spanish fleet waiting for them.

War between Spain and the United States was only six days old. Though Dewey was outnumbered in terms of ships — his squadron had six to the Spanish 12 — the American vessels were more modern, armed with more guns and manned by highly-trained crews. There could be little doubt as to the outcome. The battle lasted about half a day.

When the smoke finally cleared that afternoon, not a single Spanish ship was afloat. Yet not one American ship was significantly damaged. Dewey's victory in Manila Bay was total and complete, and he became a hero. More importantly, the United States gained a foothold in the Western Pacific and a Navy worth boasting about. This is the story of how that happened.

THE FLEETS

On April 25, 1898, the following dispatch was sent to George Dewey in Hong Kong harbor from then-Secretary of the Navy John D. Long:

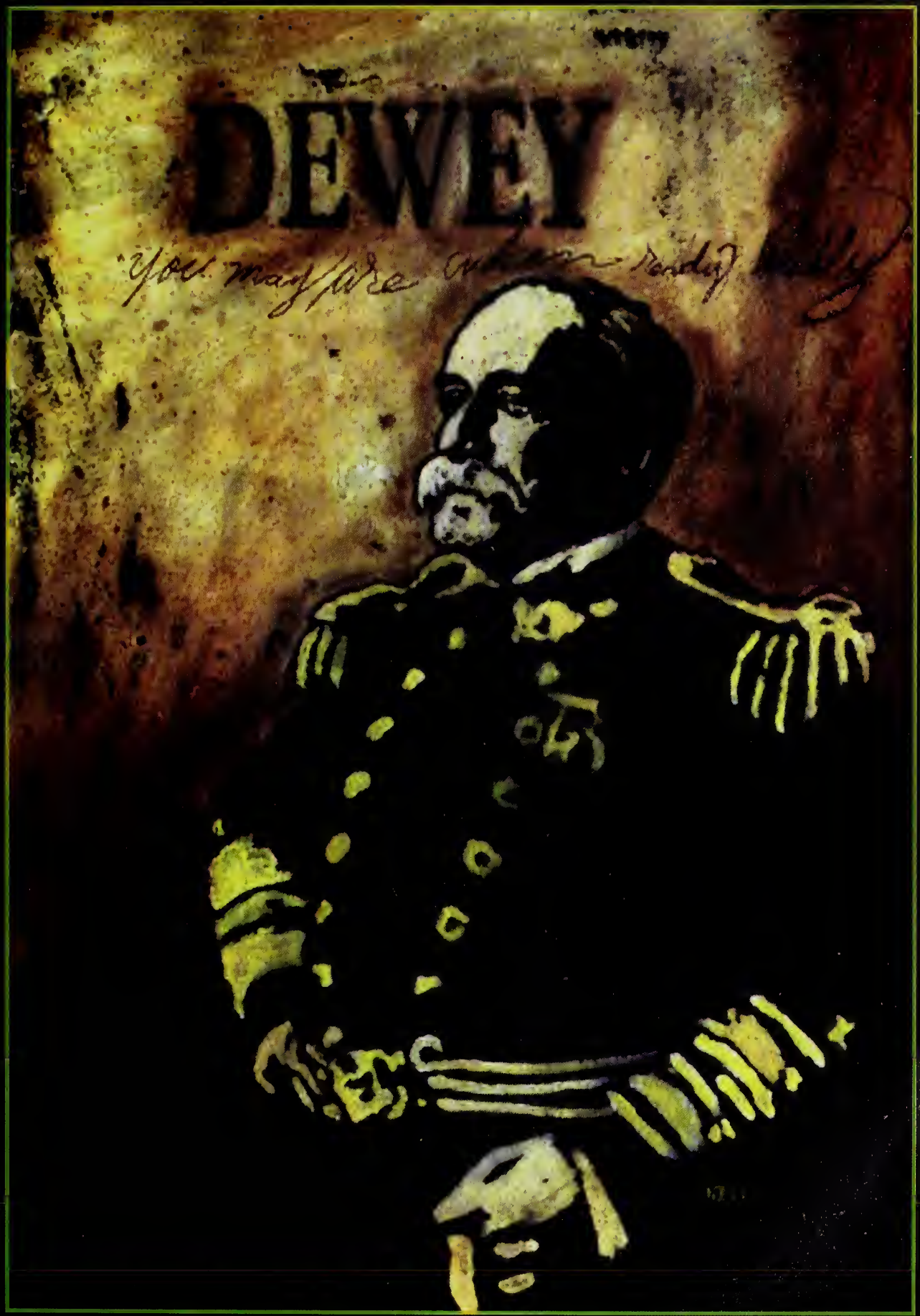
"War has commenced between the United States and Spain. Proceed at once to Philippine Islands. Commence operations particularly against the Spanish fleet. You must capture vessels or destroy. Use utmost endeavor."

The message was no surprise. Dewey had been expecting it. Before that dispatch reached him, he had ordered all his ships to be battle ready. Coal bunkers were filled, engines were repaired, magazines were restocked, gunnery practice was held and Sailors hung over the sides painting the white ships a wartime gray. One ship was dry-docked, scraped and painted within 24 hours. Throughout, Dewey remained confidant. "Our squadron will be superior to the Spanish," he wrote his son. "I think it will be short work for us."

The American squadron was not big, but it packed a pretty mean punch. Besides his flagship, the cruiser *Olympia*, Dewey had three other cruisers — *Baltimore*, *Boston* and *Raleigh*. He also had two gunboats, *Concord* and *Petrel*, and the revenue cutter *McCulloch*. All told, his force consisted of more than 1,800 men, 33 mounted guns of six inches or more that could fire a broadside totaling 3,700 pounds.

Opposing him was Admiral Patricio Montojo Pasaron and a Spanish squadron of 12 vessels — seven cruisers, five gunboats, two torpedo boats and two transports. Of the cruisers, only Montojo's flagship, *Reina Christina*, could be called modern. She came in at 3,500 tons and mounted six 6.2-inch guns, but she was not considered seaworthy due to a leak in her hull. Another of Montojo's cruisers, the wooden *Castilla*, was unable to move under her own power.

Together, Montojo's fleet had 1,200 men, 14 mounted



Painting by DMSN Michael Noeth



guns of six inches or more and fired a broadside totaling 1,273 pounds.

What the Spanish admiral did have in his favor, though, was the added strength of several shore batteries protecting Manila and the entrance to the harbor. Realizing he had little chance of defeating Dewey in a battle of maneuver, Montojo planned to fight at anchor, using his ships as a fortress fleet to supplement these batteries. Wisely, he anchored off Cavite rather than Manila itself. "I refused to have our ships near the city of Manila," he said, "because, far from defending it, this would provoke the enemy to bombard the plaza, which doubtless would have been demolished on account of its few defenses." On April 30, towing the *Castilla* behind a transport ship, Montojo anchored his fleet in line of battle: *Reina Christina, Castilla, Don Juan de Austria, Don Juan de Ulloa, Luzon, Cuba* and *Marques del Duero*. The stage was set.

PRELUDE TO BATTLE

After receiving his orders, Dewey waited in Mirs Bay (some distance up the Chinese coast from Hong Kong) for 36 hours until the American consul arrived from Manila with the latest word on Spanish preparations. Satisfied that he was ready, Dewey set sail for the Philippines on April 27. He drilled his men hard throughout the three-day transit. Battle drills were conducted day and night — fire fighting and damage control training, too. So concerned was he about the threat of fire that he ordered practically everything flammable thrown overboard. Wooden chairs, books, tables, chests and even paint cans bobbed up and down in the fleet's wake. The commodore was leaving nothing to chance.

On the afternoon of April 30, the squadron arrived in Subic Bay and looked around. They expected some Spanish presence there, but Montojo had evacuated the area days before to strengthen his position at Manila. Finding them gone, Dewey knew just where to search. "Now we have them," he remarked.

Off Cavite, Montojo received word of Dewey's movements. "At 7 p.m. I received a telegram from Subic announcing that the enemy's squadron had entered the port at 3 p.m., doubtless seeking our ships." He knew that when Dewey didn't find him there, he would come full bore to Manila. It was just a matter of time. With only hours left to prepare, the Spanish admiral put his commanders on full alert, gun crews at the ready.

The broad opening into Manila Bay is divided into two channels, the larger one being about three and a half miles wide and 17 to 30 fathoms deep. Dewey figured that its depth would prevent effective mining and its width would prevent accurate fire from the shore batteries flanking either side. But some on his staff disagreed and felt the threat of mines to be very real. Dewey remained adamant. In reply to the suggestion of his nephew, Lieutenant William Winder, that a supply ship lead the formation in, Dewey said, "Billy, I have waited 60 years for this opportunity. Mines or no mines, I am leading the squadron in myself."

FIRST SHOTS

Just after midnight on May 1, 1898, the commodore did just that. With men at general quarters and all lights extinguished save stern lights, Dewey's column of ships approached the entrance to Manila Bay. All was quiet. In the moonlight broken by passing clouds, they must have been visible to spotters ashore. Within minutes signal lights were seen flashing, and within minutes of that the batteries on the south side of the channel let loose. Their shots fell wide, splashing harmlessly in the water. The ships in the rear answered immediately and silenced the batteries.

Having entered the bay without a scratch, Dewey slowed base speed to four knots, timing the squadron's arrival for daybreak. It was already hot. A humid mist rose from the surface of the water. Pitch bubbled up from

seams in the deck, sticking to the bottoms of shoes. Below decks, with all portholes secured, men felt like they were being cooked alive. Charles Twitchell, a coal stoker aboard the flagship, vividly recalled the conditions: "The clatter of the engines and the roaring of the furnaces made such a din it seemed one's head would burst. The heat grew so unbearably fierce at times our hands and wrists would seem on fire, and we had to plunge them in water." Another Sailor proclaimed that, "Hell ain't no hotter than this!"

"Billy, I have waited 60 years for this opportunity. Mines or no mines, I am leading the squadron in myself."

-- Commodore George Dewey

The commodore was not unsympathetic. At 4:30 a.m., he ordered all personnel working below to come topside for a break. There, they were given water and coffee and a chance to breathe the fresh morning air. The gesture was not lost on the grateful crew. "We knew that might mean that this was the last glimpse we would ever get of the deck," remembered Twitchell, "and we went down prepared to go to the bottom of Manila Bay. Battened down the way we were ... . Had she been sunk there would not have been the slightest chance of escape."

Dewey's timing was perfect; the squadron arrived off Manila just after 5 a.m. Through the early morning mist men could see the church spires and rooftops of Manila but no Spanish ships. Then Dewey looked south — there they were, lying at anchor in a crescent-shaped column stretching west to east off Sangley Point. Just then the city's batteries opened up, but the commodore ignored them as their shots screamed overhead. He had found his prey. Calmly he ordered a right turn and an increase in base speed to eight knots, steering the column straight for the Spaniards. A nervous *Chicago Record* correspondent, John T. McCutcheon, riding aboard *McCullough*, likened the move to "going into the jaws of a dragon." The end of an era was at hand.

BATTLE

Aboard *Reina Christina*, Montojo watched and waited. He heard the shore batteries firing on Dewey the night before and had ordered his forces to prepare for action. "All the vessels had taken down their masts and yards and oats," he recalled, "to avoid the effects of projectiles



USS *Olympia* leads the American squadron in battle off Cavite where near misses from the Spanish warships splashed around her. The American ships suffered only 15 direct hits, none of them critical.

and splinters, had their anchors buoyed and cables ready to slip instantly." Time was growing short and Montojo knew it. When at last he could see the Americans off Manila, he took quick stock of his forces and prepared to fight.

Standing in *Olympia's* flying bridge, Dewey listened closely as navigator Lieutenant Carlos Calkins called out the diminishing range to the enemy. In the flagship's wake, at 400 yard intervals, steamed *Baltimore, Raleigh, Petrel, Concord* and *Boston*. The little *McCullough* and two coal tenders were ordered to an isolated part of the bay so as not to hamper the cruisers. Tension was high. One of the forward gun pointers aboard Olympia reported that he had stared so intently through his gun sights during the advance that when he closed his eyes for a brief moment, the image of it had become burned on his eyelids.



Commodore George Dewey onboard his flagship USS *Olympia* in Manila Bay. The turret of one of *Olympia*'s 8-inch guns is at right, and two of her 5-inch broadside guns are seen in the background.

At about 5:15 a.m., with the American squadron three miles away and closing, Montojo ordered his fleet and shore batteries to open fire. The Spanish guns roared to life. From his vantage point, it appeared to Calkins that "fire-crackers" were exploding on *Reina Christina* and *Castilla*. One shell from *Christina* ricocheted off the water and tumbled over the mast of *Olympia*. Another cut away her forward rigging, and one 6-inch shell shot away the signal halyards not 4 feet above Dewey's head. He didn't flinch. Nor would he order a response. "We were patient for 20 minutes," Calkins remembered.

Finally, at 5:40 a.m., with the range closed to 5,500 yards, Dewey hailed Captain Charles Gridley, *Olympia's* commanding officer. "You may fire when ready, Gridley," he ordered. Almost immediately, the American guns spoke with one dreadful voice. "Like an echo the bugles sounded 'Fire!'" recalled a gunner's mate, and the starboard, 8-inch bow gun "belched her pent up venom" at *Reina Christina*. "Riding back on her trunnions, she slid again into battery as No. 2 [gunner's mate] with crank in hand, stepped out to meet her."

After a few minutes, Dewey ordered another right turn, running his squadron parallel with the Spanish at about 4,000 yards. As the American cruisers, steaming now at a closer 200-yard interval, wheeled in line behind the flagship the fighting became general. Shells rained down on Montojo and his fleet. "The Americans fired most rapidly," reported the Spanish admiral. "There came upon us number-less projectiles, as the three cruisers at the head of the line devoted themselves almost entirely to fight the *Christina*."

But so thick was the smoke over the bay that gunners on both sides found it impossible to gauge accuracy. What little the Americans could see told them the Spanish had not been hit hard enough. To compensate, Dewey ordered his squadron to pass back and forth in front of the enemy line in a series of long ellipses, making three [passes] from eastward and two from westward. Ensign W. Pitt Scott of *Olympia* remembered the decision: "We had anticipated that once across their line would be sufficient to silence them, but they did not yield, and so ... we turned and went back at them again. It was getting real interesting now, for many of their shots were coming close aboard, and the screech of the shots as they whistled over our heads was anything but pleasant."

At one point, Dewey got as close as 2,000 yards to Montojo's fleet. The firing became relentless. Exploding shells were so numerous and so thick that watching them almost became mere distraction. "Now and then we would see a shot strike the water ahead of us and explode and the pieces of it come at us," recalled Scott. "I was surprised to find how little it disturbed us." Dewey



The crew of USS *Olympia* march in New York's Dewey Day Parade Sept. 26, 1899. The battle made Dewey and his men national heroes.

himself tried early on to count the number of Spanish shots but soon had to give up. He, too, was unconcerned. "When a shell comes straight along through the air one does not have time to catch sight of it until it has passed. ... But when it bursts in the air before one's face the air seems to be full of chunks of metal."

BREAKFAST

After slugging it out for two hours with Montojo, Dewey decided to draw off and check his ammunition stores. He had received reports of dangerously low amounts and needed verification. So as not to worry his men, the commodore passed it off as a chance to eat breakfast. One eager gunner spoke for many when he yelled out, "For God's sake, captain. Don't let us stop now! To hell with breakfast!"

Nevertheless, the break was welcome. "It was only 7:30, but it seemed to us all as if it were the middle of the day," remarked Scott. Men poured out on deck from the oven below in any matter of dress. To Calkins, it looked as though uniforms were chosen "according to natural selection." Sailors sported golf caps, pith helmets, old pajamas and skimpy undershirts. Indeed, some were barely clothed. "It was the dirtiest-looking crowd that I have ever seen," said Scott. "It was so hot that many had stripped off nearly all their clothes; in fact, in the turrets they did strip off about everything except their shoes, which they kept on to protect their feet from the hot floor." Awaiting them in the fresh air were sardines, hardtack, corned beef and coffee. It tasted good.

The news Dewey received was also good. Not only did he have ample ammunition left, but his squadron had suffered very little damage indeed. There were no casualties, except one aboard the *Baltimore*. *Olympia* and *Baltimore* were each hit five times, with *Boston* taking four shells and *Petrel* only one. None of the hits were critical.

The same could not be said for the Spanish. As the smoke cleared, the carnage inflicted by American gunnery became clearly evident. With the exception of a few gunboats, Montojo's force had been totally annihilated. *Reina Christina* and *Castilla* were both sunk, and the rest lay twisted and burning in the shallow water off Cavite. More than 300 Spanish sailors were killed or wounded.

CONCLUSION

Dewey reengaged just after 11:00 a.m. but met little, if any, resistance. By 12:30 p.m., the Spanish colors over the arsenal on Sangley Point were replaced by a white flag. The Battle of Manila Bay was over.

When news of the American victory reached home, the nation went wild and Dewey became an instant hero. Domestic support for the war against Spain rose to an all-time high. On Aug. 13, 1898, Manila fell to an American occupation force with only token resistance, paving the way for American annexation of the Philippine Islands.

The United States had finally acquired a foothold in the Western Pacific, the importance of which would not fully be realized until World War II.

But that's another story... ⚓





CyberSailor

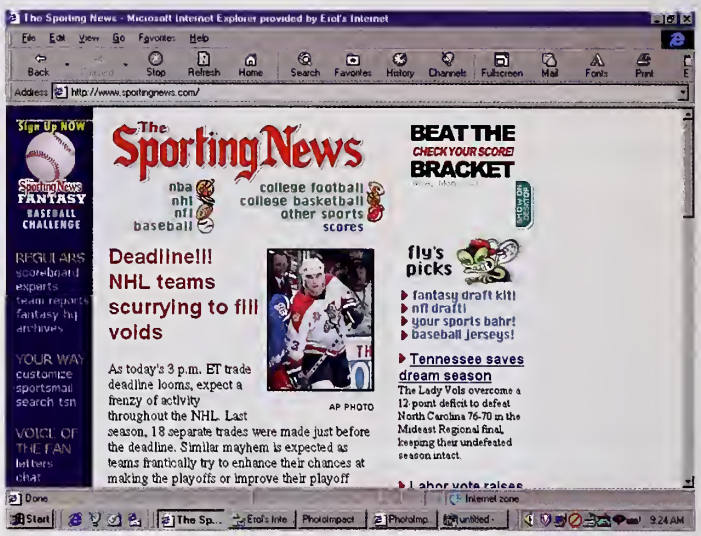
The Sporting Life

The Navy's filled with sports nuts. I'm not talking about your run-of-the-mill fan here. No, I'm talking about the true fanatic, the type of individual who craves sports news like normal people need air. In the days before the "net" and other news sources, shipboard Sailors made sure they had an inside source in Communications, someone who could pass along the scores as the games were in progress.

Today, not every ship has Internet access — at least not yet. For those Sailors, the Navy is providing news services to keep them up-to-date on whatever season it happens to be. Take *Stripes Lite*, for instance. Every day, ships at sea can get the bare bones version of the *Stars and Stripes*, including sports news. "TimesFax," a service of the *New York Times*, also makes sure shipbound seamen receive their daily dose of sports pills.

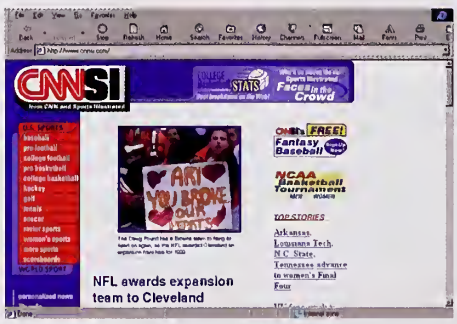
For those fortunate enough to have access to the web, at sea or ashore, there is a veritable stadium of quality sites with stats on your favorite teams.

Let's start off with the sites that give everyone something. Yahoo! Sports (sports.yahoo.com/) offers pages featuring the NBA, NHL, NFL, NASCAR, tennis, golf, soccer and more sports than you can stand at one sitting (stand at one sitting? Did I really write that?). Other sites worth checking out include ESPN Sportszone (espn.sportszone.com/), CNN/SI (www.cnnsi.com/), CBS SportsLine (www.sportsline.com/) and The Sporting News (www.sportingnews.com/). Most of these sites feature scrolling scoreboards so you don't have to search for the latest box scores from ongoing Major League Baseball games.



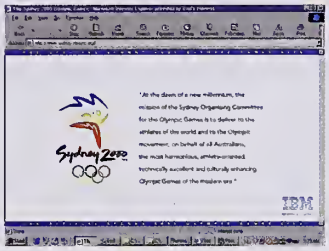
And speaking of Major League Baseball, the season is in full-swing (pardon the pun). Each team can be found on the web so fans can get the current line-up, complete team roster and even purchase tickets. For instance, I profess a life-long devotion to MY San Francisco Giants (www.sfgiants.com) and their page keeps me informed even when I'm stationed on that "other" coast.

Beyond professional sports, amateurs offer some of the most exciting games around. Did you check out the official web site during the recently-completed Nagano Olympics? Despite the weird weather, IBM kept the latest news from Japan flowing around the world. You can check out the latest goings-on in Sydney, even though it's still two years away. The Sydney 2000 homepage can be found at www.sydney.olympic.org.



While the Olympics may be

the pinnacle of amateur sport, these athletes have to start somewhere. One such place is in the Navy. Go to the Navy Sports Center (www.navysports.com/) and get the latest news on the Navy Midshipmen. The site is complete and covers all the sports at the U.S. Naval Academy. If you want the official word, the academy also has its own page from the athletic department (www.nadn.navy.mil/athletics.htm).





With some searching, you may even find some sites of special interest to Sailors. For instance, take the Navy Shooting Team (www.usnst.org/). This loose organization helps coordinate Sailor participation in Navy and national shooting competitions.

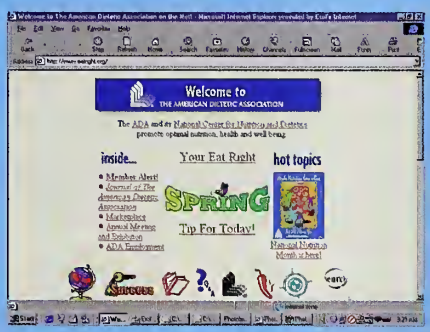
From baseball to baton twirling, from polo to hacky sack — you can find what you want at a place that is truly at your fingertips — the internet.

You can't sit there forever!

As I sat at my computer contemplating this month's article, I began to notice something. It was my chair. Although I haven't had it for very long, it's contours had already started reshaping themselves to ensure that I, and I alone, could feel fully comfortable within the chair's gentle grip.

Could it be? Could I have been sittinf a tad bit too long in front of the computer? You betcha!

I heard an expert on the radio say that, for every hour spent on the computer, we should be spending five minutes exercising! I thought I was doing that. Every so often I do get up and go for a walk. I mean, the coffee is located on the other side of the office and the parking lot requires that I negotiate steps, curbs and the occasional puddle.



Maybe that wasn't what was meant by "exercise."

Lucky for me (and maybe you?) there are people who do know what exercise is and how it can make our lives better. Start, for example, with the American Medical Association (AMA). The AMA's Health Insight site has a page devoted to general health topics (www.ama-assn.org/insight/gen_hlth/fitness/fitness.htm). From warm up and cool down to a list of reasons to start a program, this site has information collected from medical experts designed to get us off the coach and into the gym.

World Fitness (www.worldfitness.org/) is maintained by an American Council on Exercise (ACE)-certified personal trainer. In addition to help in designing an exercise program, there are also instructions on building your own step exercise equipment (unless you like spending $50). Another site worth checking out is designed by a certified aerobics instructor. Train the Smart Way (k2.kirkland.cc.mi.us/~balbachl/fitness.htm) provides you with a lot of information and, most importantly, links to sites on just about any fitness topics you can think of.

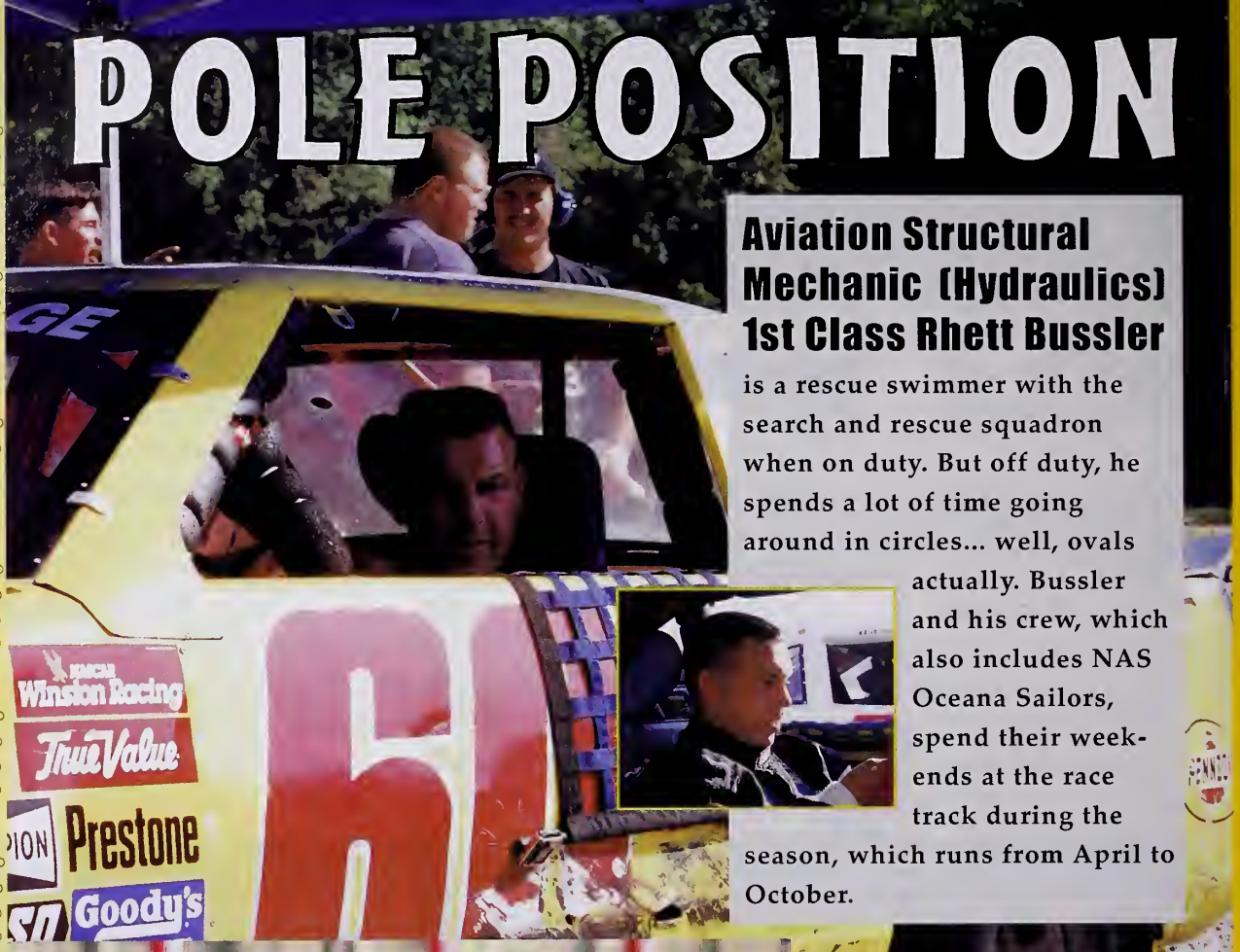
"Garbage in, garbage out" is a phrase most computer-users know. The same is true when it comes to fitness. It figures that what we eat should have a part in how we feel. One of the most complete places to visit belongs to the American Dietetic Association (www.eatright.org/). This site is home to the association's Eat Right Campaign and features a daily nutrition tip. This page provides a long list of links to diet and nutrition sites and is a good starting point in your search for food facts.

You can't argue that staying fit helps us live longer and better. As computers become more and more a part of our lives, fitness and exercise become all the more important.

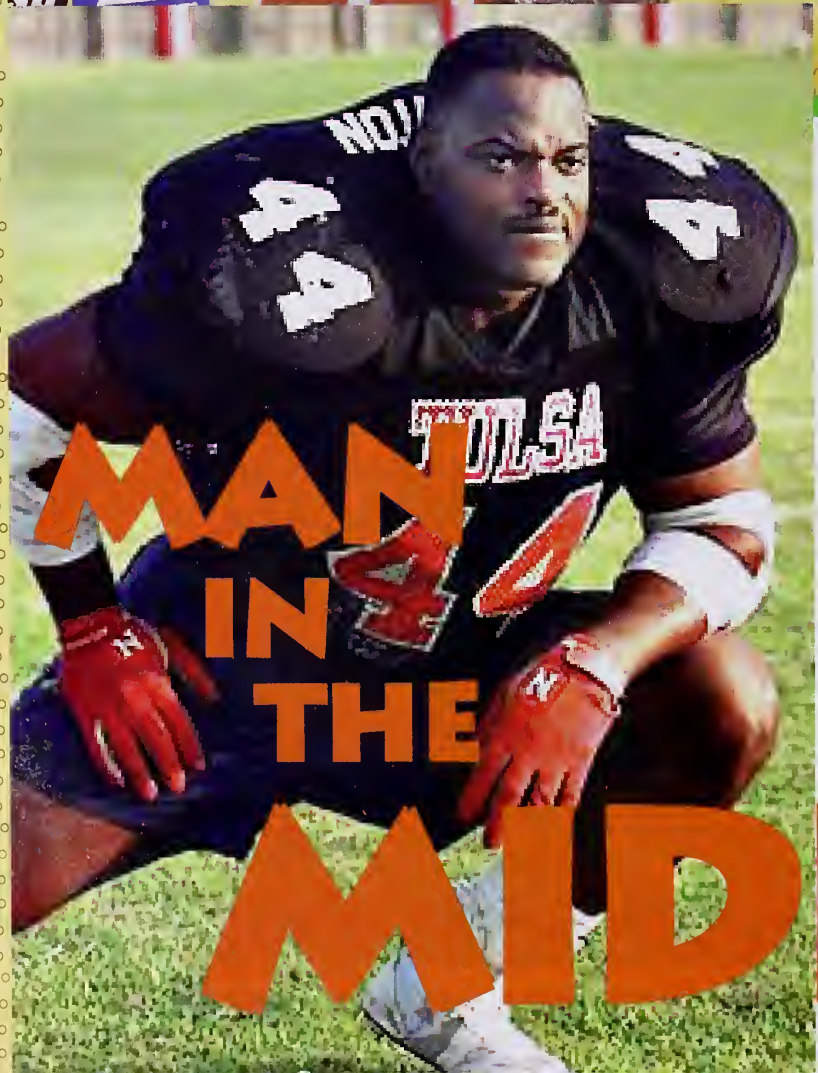
(The mention of Internet sites in this article does not imply endorsement by the DOD, DON, the Naval Media Center or All Hands magazine.)

SHIPMATES

POLE POSITION



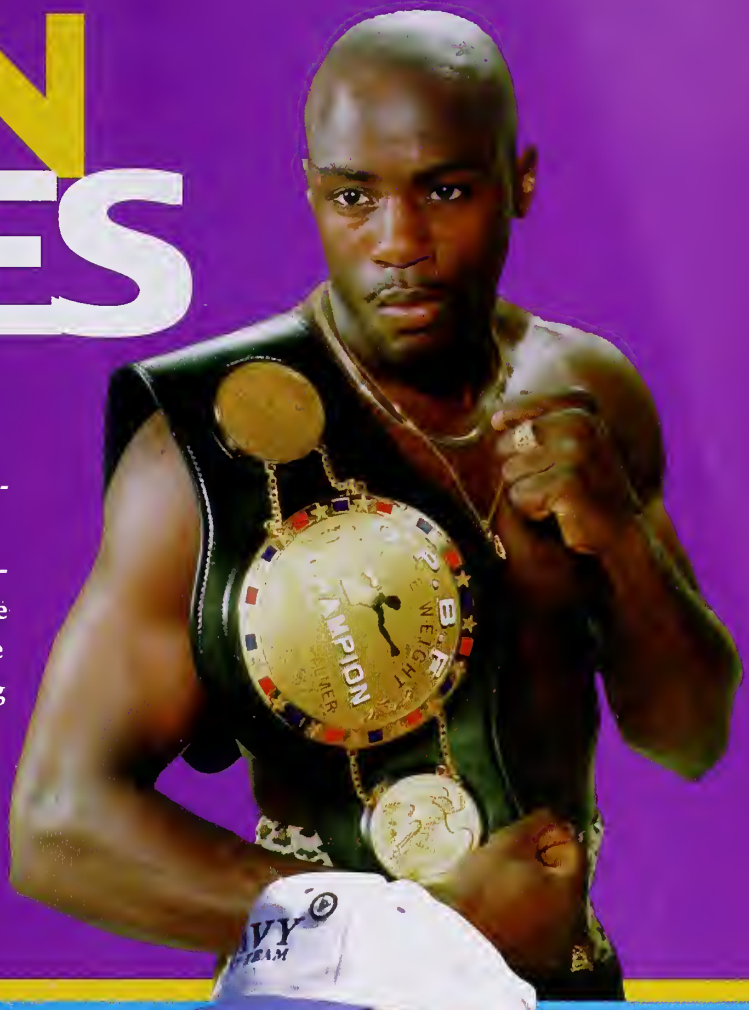
Aviation Structural Mechanic (Hydraulics) 1st Class Rhett Bussler is a rescue swimmer with the search and rescue squadron when on duty. But off duty, he spends a lot of time going around in circles... well, ovals actually. Bussler and his crew, which also includes NAS Oceana Sailors, spend their weekends at the race track during the season, which runs from April to October.



MAN IN THE MIDDLE

Navy Career Counselor Chief (SW) Bill McClinton played semipro football with the Tulsa Bandits until his transfer to Navy Recruiting San Diego. He began his semi-pro career in 1991 with the Chicago Thunder as a middle linebacker and was voted Defensive Rookie of the Year in 1992.

GOLDEN GLOVES



Master-at-Arms 2nd Class (SW) Kevin Palmer is the current Oriental Pacific Boxing Federation Middleweight Champion. The Brooklyn, N.Y., native is assigned to Commander, Fleet Activities Yokosuka, Japan, and has held his championship belt for the past 18 months. His record of 17 wins, 0 losses and 1 tie (with 10 knockouts) places him 5th in the World Boxing Association rankings.

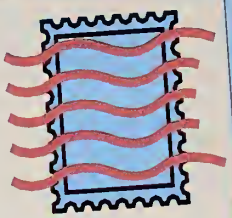
STRAIGHT SHOOTER

Machinist's Mate (DV) David Cunningham aims to be the best when it comes to skeet shooting. The native of Jeffersonville, Ind., was the top military finisher at the 1997 World Championship and placed 6th overall in the Open Division. Cunningham, a member of the Navy skeet team and board member of three separate skeet organizations, is a diver assigned to Shore Intermediate Maintenance Activity, Norfolk.





Postcard from the Fleet



Name: LTJG Margaret Ashworth

Command: Naval Medical Center Portsmouth, Va.

Hometown: Schaumburg, Ill.

Hobbies: A lifelong figure skating fan, Ashworth got her chance to learn the sport 5 1/2 years ago.

Favorite Duty Station: Naval Medical Center Portsmouth, Va.

Favorite Quote: "Nothing is impossible. The impossible just takes a little longer."

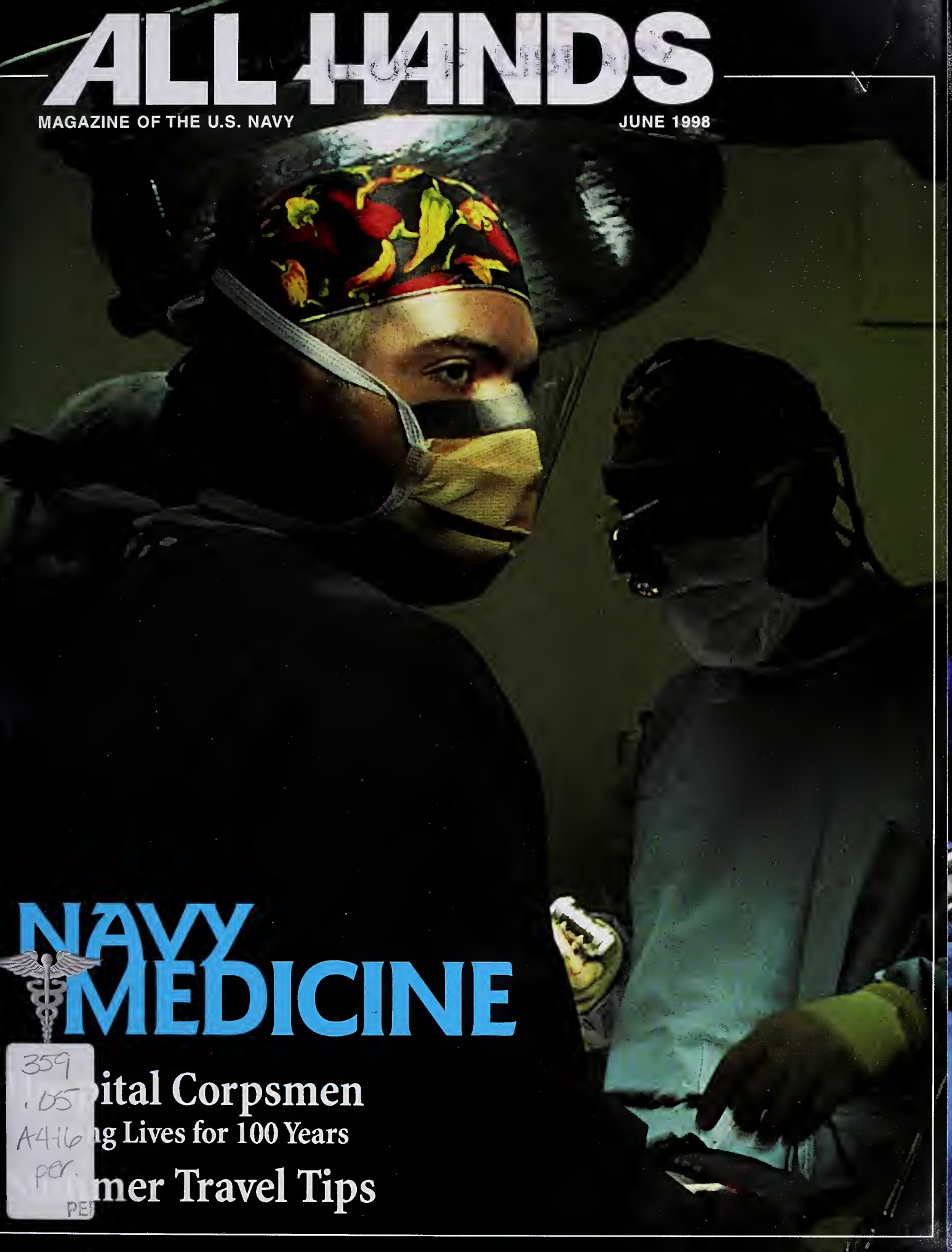
Key to Success: "Be positive. If you have a dream, you will find a way to do what needs to be done and you will make it come true."

Goals: "I want to take and pass the GRE and begin my master's degree in the Nursing program. I would also like to continue competitive skating, make the final found at the 1998 USFSA Adult National Championships and land at least two double jumps by the end of the summer."

ALL HANDS

MAGAZINE OF THE U.S. NAVY

JUNE 1998



NAVY MEDICINE

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18 *Medical Breakthrough*

A special team of doctors and hospital corpsmen at Naval Medical Research Institute, Bethesda, Md., are close to finding a way of reducing, and possibly eliminating, the risk of tissue rejection during organ transplantation.

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Wondering what to do this summer? Take a look at these pages for some fun places to go.



Courtesy of Disney World

Photo by PH2 Joseph Gunder III

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Taking a summer vacation doesn't have to cost you your savings. Check out these pages for travel bargains.

34 *Fly Free... Almost*

Flying Space-A can be a great deal if you know how to work the system. Check out these pages to see how you can fly around the world for practically nothing.

36 *"Get Up and Go!"*

If you're looking for some cool summer sites, check out our map for locations near you.



On the Cover



DT3 Colon Melendez, a surgical technologist assigned to the National Naval Medical Center, Bethesda. Md., assists during oral surgery. *Photo by PHAN Lena Gonzalez.*

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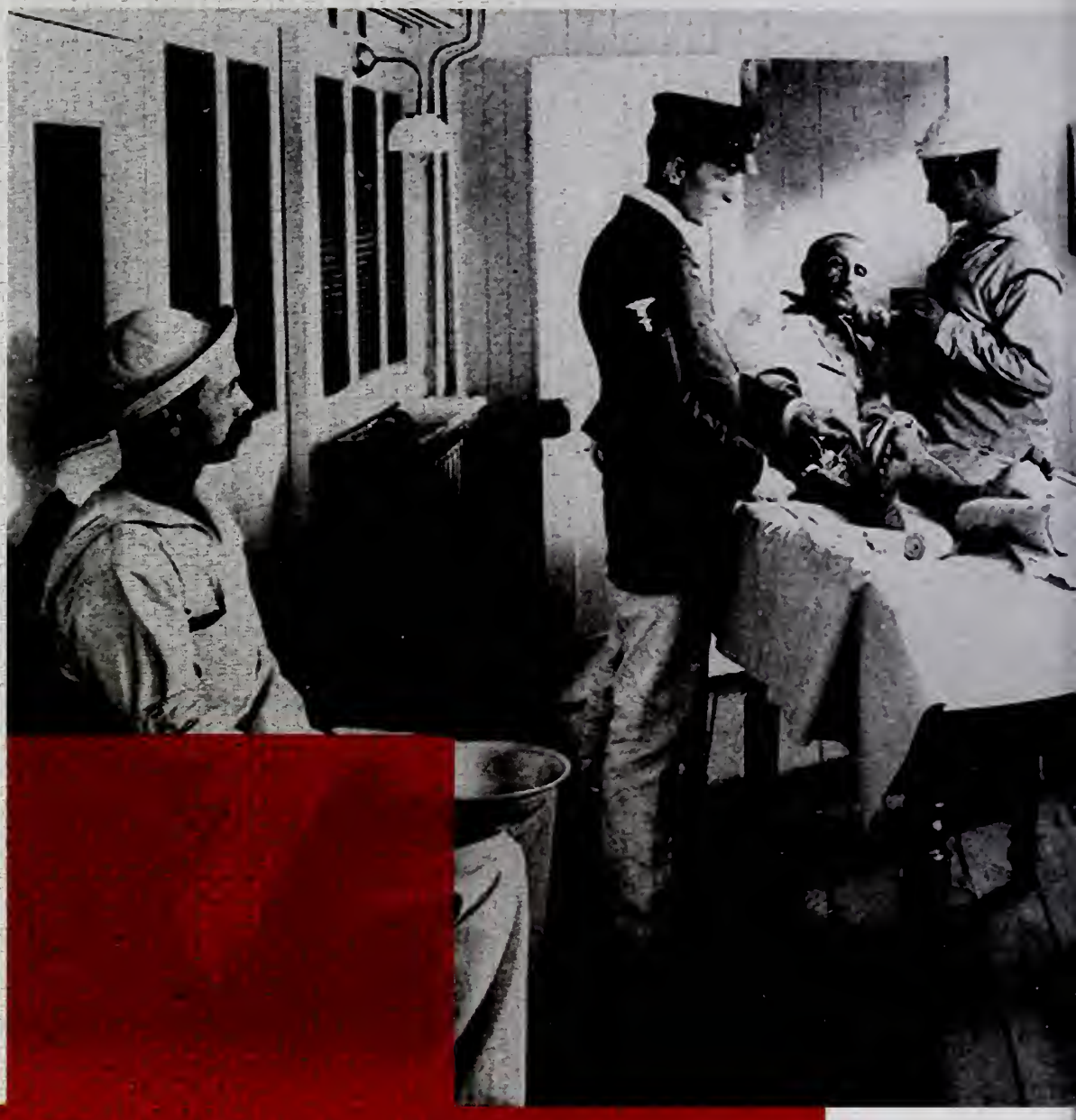
48 *Shipmates*

ALL HANDS

On Line

Check us out at ...

http://www.chinfo.navy.mil/navpalib/allhands/ah-top.html



Tradition. *Va*

By HMCS(FMF) Mark T. Hacala



An apothecary (petty officer first class) treats a shipmate aboard USS *Boston* in 1888.

Photos Courtesy of BUMED Archives

For 100 years, tradition, valor and sacrifice have marked the history of the U.S. Navy Hospital Corps. Since 1898, hospital corpsmen have cared for wounded and sick Sailors and Marines. Their continuous dedication to saving the lives of their patients, frequently at the risk of their own, has earned them accolades at sea and on land through every war and conflict of the 20th century.

Prior to the establishment of the Hospital Corps, enlisted personnel assisted the ship's surgeons in caring for the sick. Junior and senior medical department personnel changed rating names several times between 1775 and 1898, using colorful titles at each phase. The name "loblolly boy," one who carried loblolly or porridge to the sick, was used until the Civil War when it was replaced by "nurse." In the 1870s the name "nurse" was retitled "bayman," because the Sailor worked in sick bay. Senior personnel were known as surgeon's stewards and later as apothecaries.

By the late 1800s, the Surgeon General of the Navy advocated a new system of



Pharmacist's Mate First Class Thomas Moore performs an appendectomy in the wardroom of USS *Silversides* in enemy waters, December 1942. Two other hospital corpsmen performed successful appendectomies under similar circumstances during World War II.

lor. Sacrifice.

Hospital corpsmen celebrate 100 years of service.

U.S. NAVY MEDICAL ALMANAC

TOTAL ACTIVE DUTY MEDICAL FORCE: 37,364

Doctors: 4,018

Nurses: 3,214

Hospital Corpsmen (total): 23,309

- **Independent duty corpsmen:** 1,379
- **Corpsmen stationed aboard ship:** 748
- **Corpsmen attached to Fleet Marine Force:** 4,444

Dentists: 1,331

Dental Technicians: 2,899

- **Dental Technicians stationed aboard ship:** 267

Medical Service Corps Officers: 2,593

MEDICAL STATS (1997)

Pints of blood donated per year: 9,457

Live births in Navy hospitals: 19,102

Average in-patient stay (1990): 4.43 days

Average in-patient stay (1997): 3.18 days

Eyeglass prescriptions filled: 418,118

Source: BUMED

employing medical department Sailors. Rather than assigning one of the crew out of necessity, as was done with many loblolly boys and baymen, a trained group of volunteers was advocated. Based on the model of the Army's Hospital Corps, the Navy would seek recruits, pay them better, and train them uniformly. This plan was adopted during the Spanish-American War when President William McKinley signed into law a bill establishing the Navy Hospital Corps, June 17, 1898.

The early history of the corps set a pace of conspicuous service that continues to the present. During the 1900 Boxer Rebellion in Peking, China, Hospital Apprentice Robert Stanley volunteered for the dangerous mission of running message dispatches under fire. For his bravery, Stanley became the first in a long line of hospital corpsmen to receive the Medal of Honor. Five years later, when USS *Bennington's* boiler exploded in San Diego harbor on July 21, 1905, Hospital Steward William Shacklette was badly burned along with almost half the crew. Although seriously hurt, he rescued and treated many of his shipmates. He too was given the Medal of Honor.

Within a few short years, the Hospital Corps would face the rigors of combat with the Marines in World War I. Through machine gun fire and mustard gas, hospital corpsmen treated more than 13,000 casualties in France. This group of 300 Sailors would earn two Medals of Honor, 55 Navy Crosses, 31 Army Distinguished Service Crosses and 237 Silver Stars. Their 684 personal awards would make them the most decorated American unit in World War I. "There were many heroes who wore the insignia of the Navy Hospital Corps," noted a Marine Corps regimental commander at Belleau Wood where 4,600 Marines fell to enemy fire.



Naval Hospital San Diego's ambulance, manned by hospital corpsmen, in the 1920s.



The Medal of Honor

The Medal of Honor was established by a Joint Resolution of Congress on July 12, 1862, and later amended by Congress in 1918 and 1963.

The award is presented by the President, on behalf of Congress, to any person whose actions exhibit a level of personal bravery or self-sacrifice so conspicuous as to clearly distinguish that individual above his comrades. These actions must have involved risk of life, above and beyond the call of duty, while engaged in an action against an enemy of the United States or during other situational armed conflicts.

The medal was originally awarded to petty officers, seamen, landsmen and Marines. Officers were not eligible until March 3, 1915, but some awards were made retroactive to earlier campaigns. An act of Congress on Aug. 7, 1942, established the Medal of Honor as a combat award only. It is the highest award for gallantry that the United States bestows.

Photo above: Hospital corpsmen in front of an aid station near Verdun, France, April 1918. A total of 300 medical Sailors served with the Marines in France. They earned 684 personal decorations, making them the most decorated American unit of World War I.

Hospital Corps and Medical Personnel awarded the Medal of Honor:

Pharmacist's Mate 1st Class John H. Balch
Hospital Corpsman 3rd Class Donald F. Ballard
Hospital Corpsman 3rd Class Edward C. Benfold
LT Joel T. Boone, MC
Hospital Apprentice 1st Class Robert E. Bush
Hospital Corpsman 3rd Class Wayne M. Caron
Hospital Corpsman 3rd Class William R. Charette
Hospitalman Richard D. Dewert
Surgeon Middleton S. Elliott
Pharmacist's Mate 2nd Class William D. Halyburton, Jr.
Hospitalman Francis C. Hammond
Hospital Apprentice 1st Class David E. Hayden
Hospitalman John E. Kilmer
Surgeon Cary D. Langhorne
Hospital Apprentice 1st Class Fred F. Lester
LCDR Alexander G. Lyle, DC
Hospital Apprentice Fred H. McGuire
LTJG Weedon E. Osborne, DC
LT Orlando H. Petty, MC
Pharmacist's Mate 1st Class Francis J. Pierce
Hospital Corpsman 2nd Class David R. Ray
Hospital Steward William S. Shacklette
Hospital Apprentice Robert H. Stanley
Pharmacist's Mate 2nd Class George E. Wahlen
Pharmacist's Mate 3rd Class Jack Williams
Pharmacist's Mate 1st Class John H. Willis
Hospital Apprentice 1st Class William Zuiderveld

U.S. NAVY
MEDICAL ALMANAC

DENTAL STATS (1997)

Fillings: 539,790

Root canals: 28,185

Teeth pulled: 169,239

Reconstructed teeth: 24,182

Dental exams: 2,482,387

X-rays: 1,166,700

Cleanings: 354,899

Sealants: 191,409

Peridontal procedures: 2,110,897

Dentures: 7,682

TOP 5 REASONS PATIENTS ARE ADMITTED TO NAVAL HOSPITALS:

1. Baby deliveries
2. Knee procedures
3. Uterine procedures
4. Chest pain
5. Digestive disorders.

Source: BUMED

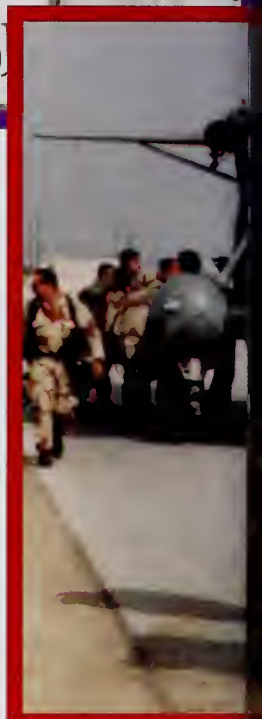


Hospital corpsmen also set an exceptional record of valor in World War II. They worked in hospitals and hospital ships all over the world, set up beach aid stations in Italy and Normandy, bandaged kamikaze survivors at sea, and dodged bullets and shells during the bloody island campaigns in the Pacific. Their initiative and skill was noteworthy. Pharmacist's Mate First Class Wheeler Lipes, Harry Roby and Thomas Moore each performed a successful appendectomy, without the aid of a physician, while aboard submarines in enemy waters.

Pharmacist's Mate Second Class John H. Bradley's heroism with the 28th Marines on Iwo Jima is typical of acts repeated by hospital corpsmen throughout the war. Bradley rushed through a mortar barrage and heavy machine gun fire to aid a wounded Marine. Although other men from his unit were willing to help, Bradley motioned them to stay back. Shielding the Marine from fire with his own body, the hospital corpsman administered a unit of plasma and bandaged his wounds. He then pulled the man 30 yards under fire to safety.

Bradley was awarded the Navy Cross for his valor, but it was another courageous act that would put him in the history books. Days later, he and five Marines were captured in Joe Rosenthal's famous photograph of the second flag raising on Iwo Jima's Mt. Suribachi. This image has been reproduced perhaps more than any photo in history. It was the model for the Marine Corps War Memorial in Arlington, Va., and made Bradley the first U.S. Navy Sailor to appear on a postage stamp. But Bradley's heroism was not an isolated act. In World War II, the Hospital Corps would earn seven Medals of Honor, 66 Navy Crosses, 465 Silver Star Medals, and 982 Bronze Star Medals, as well as countless other commendations and debts of gratitude.

Although the U.S. commitment to the Korean War was limited, 30,064 Marines and Sailors were killed or wounded. As in previous conflicts, hospital corpsmen distinguished themselves. All five enlisted Navy Medals of Honor for the Korean War were awarded to members of the Hospital Corps. One of those awardees, retired HMCM(SS) William Charette, reflected years



Rushing a casualty to triage from a CH-53 helicopter. Hospital corpsmen served with fleet hospitals and with Marine Corps units in the Persian Gulf War, 1990-1991.

Women entered the Hospital Corps in World War II as WAVES (Women Accepted for Volunteer Emergency Service). A separate school was established in 1944 to train them in Bethesda, Md.

later on his pride in being a hospital corpsman in Korea. "It's amazing that somewhere there are some people walking around that wouldn't be here unless we had been there."

In Vietnam, hospital corpsmen played a critical role in aiding the 70,000 Navy and Marine Corps casualties. At station hospitals in Saigon and Da Nang, aboard hospital ships offshore, with medical battalions and in the field with Marines, hospital corspmen ensured the best possible care for the wounded, often at the risk of their own lives. When an enemy grenade landed near HM3 Donald Ballard and several casualties, he covered the grenade with his body to save his Marines' lives, earning him the Medal of Honor. "My job was needed," Ballard said recently. "I felt good about it." Bravery earned hospital corpsmen 450 combat decorations in Vietnam, but not without a cost. The Hospital Corps lost 638 of their own.



Hospital corpsmen continued to serve in peace, in war and in situations that straddled that line during the 1980s. They treated gunshot and shrapnel wounds in Beirut in 1983, when a peacekeeping mission escalated into a shooting war. Of the 18 hospital corpsmen in the Marine Battalion Landing Team Headquarters building on October 23, only 3 survived the truck bombing which killed a total of 241 Americans. Days later, other hospital corpsmen would participate in the invasion of Grenada. In the Persian Gulf, independent duty hospital corpsmen would care for casualties aboard USS *Stark* in 1987, USS Samuel B. Roberts in 1988 and in Panama in 1989.

Iraq's 1990-91 invasion of Kuwait again provided challenges for the Hospital Corps. Corpsmen around the globe reacted as their ships, stations and Marines deployed or prepared to receive casualties. Their numbers were augmented by 6,739 Naval Reserve hospital corpsmen who were recalled to active duty. The first Purple Heart awarded to a Sailor in the Persian Gulf War was given to a hospital corpsman.

While technology and equipment have changed through the years, today's hospital corpsmen continue to epitomize the tradition, valor and sacrifice displayed by corpsmen during the past century. As in the past, dedication to duty and devotion to their patients remains hospital corpsmen's greatest asset.

Happy 100th Birthday Hospital Corps.

Hacala is assigned to the Bureau of Medicine and Surgery, Washington, D.C.

U.S. NAVY MEDICAL ALMANAC

NAVY MEDICAL FACILITIES

Naval Medical Hospitals: 29

Stateside Naval Hospitals:
- Beaufort, S.C.
- Bremerton, Wash.
- Camp Lejeune, N.C.
- Camp Pendleton, Calif.
- Charleston, S.C.
- Cherry Point, N.C.
- Corpus Christi, Texas
- Great Lakes, Ill.
- Groton, Conn.
- Jacksonville, Fla.
- Lemoore, Calif.
- Millington, Tenn.
- Newport, R.I.
- Oak Harbor, Wash.
- Patuxent River, Md.
- Pensacola, Fla.
- Twentynine Palms, Calif.

Naval Medical Centers
- Bethesda, Md.
- Portsmouth, Va.
- San Diego, Calif.

Overseas Naval Hospitals:
- Guam
- Guantanamo Bay, Cuba
- Keflavik, Iceland
- Naples, Italy
- Okinawa, Japan
- Roosevelt Roads, Puerto Rico
- Rota, Spain
- Sigonella, Italy
- Yokosuka, Japan

Source: BUMED

Comb Ready!

Reconn Corpsmen: Warriors, Medics, Heroes



HM2 (DV/FMF/PJ) Steve Markham carries a wounded team member to safety as the patrol exfiltrates to a safer postion.

Photo by JO1 Rodney Furry

They are the few and the proud, but they're not Marines. They're the Navy's Special Amphibious Reconnaissance Corpsmen.

These elite hospital corpsmen are integral members of a Marine Corps reconnaissance team. While they may look and act like Marines, they are Navy hospital corpsmen and their primary mission is to provide advanced trauma management in a hostile environment.

"It takes a special breed of corpsman to qualify as a reconn-corpsman," said Chief Hospital Corpsman (DV/FMF/PJ) Robert B. Fitzgerald, the senior medical department representative at the 1st Force Reconnaissance Company, Camp Pendleton, Calif.

"Reconnaissance Corpsman are a cut above the rest. We not only have to be militarily and tactically proficient, we have a stronger dedication to duty," added Fitzgerald.

The 22 senior corpsmen and 72 junior corpsmen who make up the Special Amphibious Reconnaissance Corpsman teams must undergo an arduous training program. The training includes Marine Corps Basic Reconnaissance Training, Army Basic Airborne School, Marine Corps Combatant diver school, the Navy's Amphibious corpsmen training (which teaches hyperbaric medicine) and six months of Joint Special Operations Medical training.

Once fully trained, the corpsmen become a member of a Marine Corps platoon. That platoon depends upon the corpsman's ability to think and react quickly in combat and in other critical situations.

"It's not like a normal hospital corpsman job," said HM2(DV/FMF/PJ) Steve Markham, assigned to the 1st Force Reconnaissance Company, Camp Pendleton, Calif. "We're corpsmen and we're the ones who take care of the medical needs of the platoon, but we also have duties as Marines."

As a members of the platoon, the reconn corpsmen push themselves everyday — physically and mentally — to ensure the tip of the spear remains sharp.

"We are right in the fight along with the Marines," said Fitzgerald. "We are there to provide medical service but we are also a member of the team, maybe the point man or the radio operator. We may look and act like Marines, but we are Sailors — always," said Fitzgerald.

Rosenthal is the publishing division officer, Naval Media Center, Washington, D.C.
Furry is a San Diego-based photojournalist assigned to All Hands.

at

By LT Edie Rosenthal



Staff Sgt. Brian A. Plummer watches the team's perimeter as corpsmen pause during a patrol exercise to give care to a wounded team member.

Scrub Up

By LT Edie Rosenthal

Surgical Techs: A Vital

They're affectionately called "scrubs" and "circulators" by other hospital staff, but don't let these simple nicknames mislead you. The responsibilities of the Navy's surgical technologists are immense.

Surgical technologists serve Navy and Marine forces in a variety of vital roles both ashore and at sea. Although the responsibilities for surgical techs are diverse, these special hospital corpsmen and dental technicians thrive in the operating room (OR).

"Circulators," or circulating technologists, procure and deliver needed supplies to the surgical team while "scrubs," or scrub technologists, directly assist surgeons in the OR.

"Surgical technologists need to know the operating procedure the surgeon is going to perform," said Hospital Corpsman 2nd Class (FMF) Roger Teel, enlisted specialty leader assigned at the Naval School of Health Sciences, Bethesda, Md. "We have to anticipate the surgeon's every move."

"The ability to anticipate a doctor's moves and a meticulous attention to detail make surgical techs an invaluable member of the surgery team," said CAPT Patricia Buss, a Navy surgeon assigned to the Navy's Bureau of Medicine and Surgery.

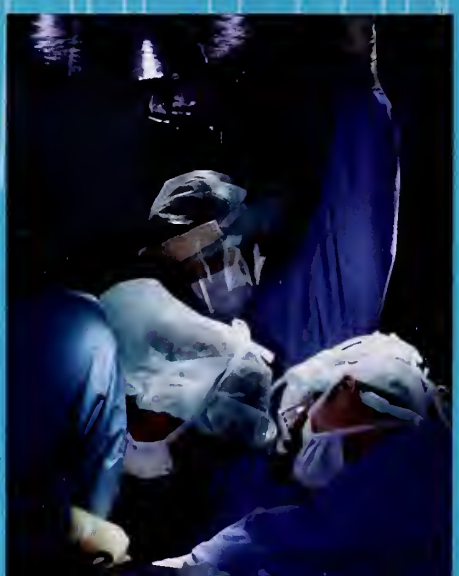


Photo by PHAN Lena Gonzalez

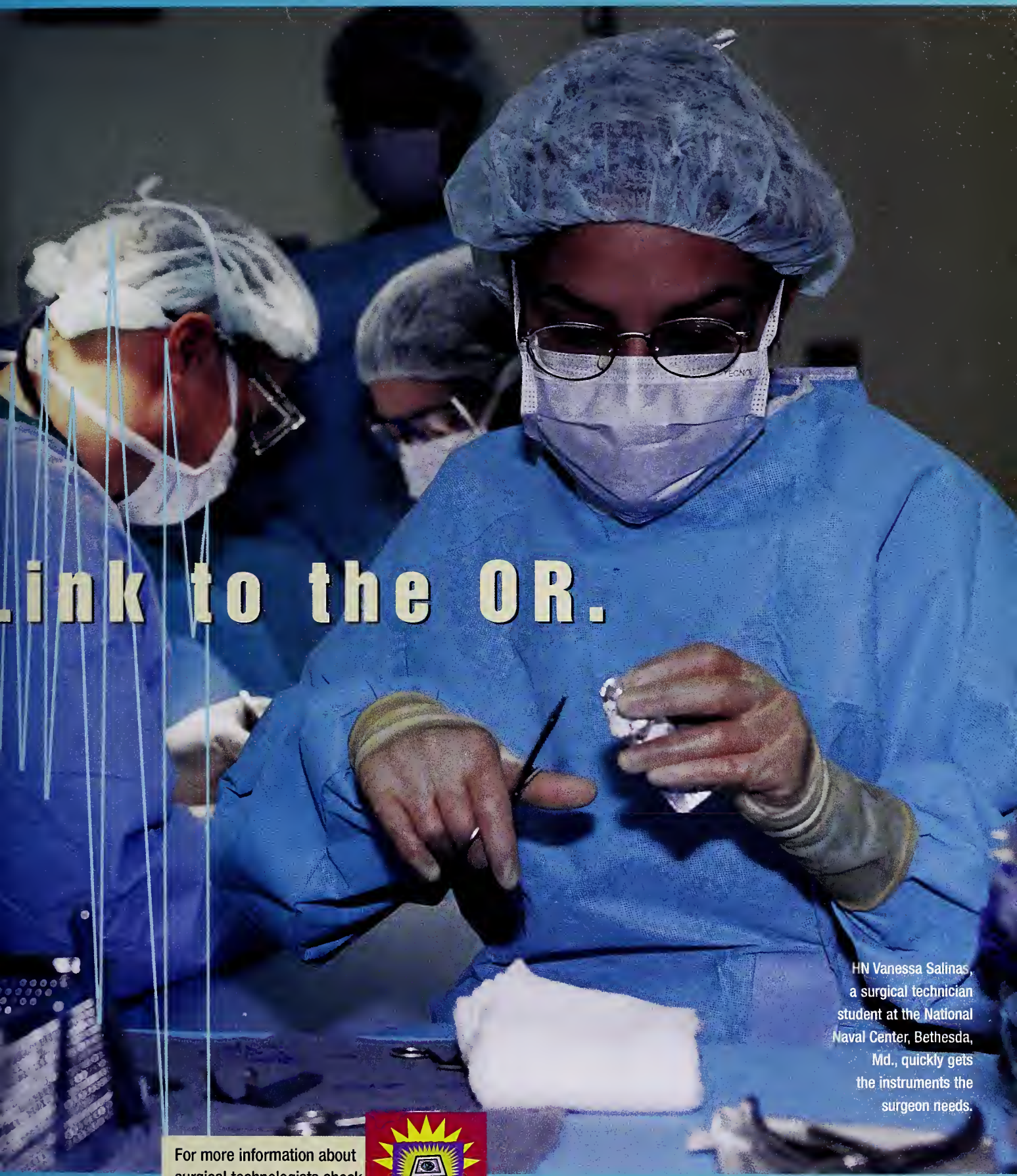
Surgical technologists are one of the largest specialties within the hospital corps, with 835 hospital corpsmen and 106 dental technicians serving worldwide.

Whenever and wherever Sailors and Marines are called upon for duty, surgery technologists are there to render medical assistance.

"Whether on board ship or in the field with the Marines, surgery technologists are up to the challenge of working with any trauma, any time. Helping our fellow shipmates and Marines who need medical assistance," said Teel.

Rosenthal is the publishing division officer, Naval Media Center, Washington, D.C. Gonzalez is a photographer's mate assigned to All Hands.

2nd LT Elizabeth Lore adjusts the overhead light to help surgeons CDR Gary Ketron (left) and LCDR Allison Coste in the OR.



Link to the OR.

HN Vanessa Salinas, a surgical technician student at the National Naval Center, Bethesda, Md., quickly gets the instruments the surgeon needs.

For more information about surgical technologists check out their Internet site at http://nshs.med.navy.mil.

By LT Edie Rosenthal

Mending the Wounds

Navy Morticians Help Families Pick Up the Pieces

Having the words "deceased" and "funeral" in their job description would make the average Sailor cringe, but for the Navy's 18 full-time morticians, it's all in a day's work.



"When most people hear that I'm a mortician they are either intrigued and want to know more about my job, or they say 'that's interesting' and kind of look away," said Hospital Corpsman 1st Class William Montague, a six-year veteran serving at Naval Medical Center Portsmouth, Va.

"Someone told me once they were surprised my hands were warm when I shook their hand," continued Montague, "I guess they thought that since I worked with dead people that my hands would be cold."

There is nothing more chaotic than the eruption of death into one's life, and the Navy's morticians provide an invaluable service to grieving families. Stationed worldwide, Navy morticians pride themselves in helping create meaningful ceremonies to honor those who have died, while also meeting the emotional needs of family and friends through counseling.

"It's extremely satisfying knowing that you've helped a family during a very difficult time either financially or emotionally by letting them know their benefits," said Montague.

"Last year, Navy morticians assisted with 396 funerals for active-duty Sailors and Marines, as well as 851 requests for burials-at-sea," said Montague, who is the enlisted specialty advisor for Navy morticians.

"Unlike a large city where the funeral director probably wouldn't know the deceased and their family, a mortician at a hospital or Navy base may personally know the deceased," added HMC James Gorham, who has been a Navy mortician for 14 years, and is assigned to the Navy Mortuary Affairs section of Military Medical Support Office, Great Lakes, Ill.

"We are professionals," said Gorham, who worked as a mortician for 12 years prior to joining the Navy. "We have to be compassionate and sympathetic without getting emotionally involved."

Being a mortician isn't a job for everyone. In fact, it is extremely difficult to join the Navy as a mortician. Navy morticians must be fully licensed with two years of experience before joining the Navy. But most importantly, the Navy's morticians must display a strong sense of compassion, inner strength, warm hands and warm hearts.

Rosenthal is the publishing division officer, Naval Media Center, Washington, D.C.

By JOSN Phillip C. Hall

Solitary Man

Sub IDCs go it alone to keep the crew healthy

The independent duty corpsman (IDC) aboard a submarine serves at the tip of the spear. As the lone hospital corpsman aboard the boat, he may not only be miles away from the nearest medical facility but hundreds of feet beneath the sea when a medical emergency occurs.

"That's one thing that makes the mission of the submarine IDC different from that of the general duty corpsman, said Hospital Corpsman" Chief (SS) Joseph Steward. "An independent duty corpsman is taught to take care of any medical problem that may come up aboard ship."

Steward, who has served as an IDC aboard two submarines, said that diagnosis is only part of a submarine IDC's job. He must also record patient medical histories, do physical exams and perform basic laboratory studies. This is accomplished without the help of an assistant or a computer.

"We do [lab analysis] all by hand using hand counters to count blood cells," he said. Steward added that after the tests are done, he routinely does research to ensure proper diagnosis.

According to Steward, another important aspect of the submarine IDC's training is radiation health. In today's nuclear Navy, he must accurately document radiation exposure and forward the information to command authorities such as the Navy's Bureau of Medicine and Surgery or Naval Sea Systems Command.

Preventive medicine is how an IDC keeps the crew healthy and ready to fight. Steward routinely inspects the galley, all food-preparation areas, the mess decks, the heads and berthing spaces.

"It's part of making sure the environment the [crew] has to live in is clean," said Steward.

As well-prepared as the IDC is for medical emergencies aboard the boat, the forward-thinking submarine squadron medical team does have contingency plans to assist the IDC.

"Most likely events will exceed equipment and resources available to the IDC rather than his skill and ability," said LCDR (Dr.) Robert Sawyer of the Naval Undersea Medical Institute.

HM1(SU/SW) Guillermo Venegas who serves as an IDC on board USS *Trepang* (SSN 674), concurs with Steward about the responsibility of IDCs.

"To become an IDC, you have to be smart and able to think on your own," said Venegas. "But, to be a good IDC, you have to be compassionate, too."

Hall is assigned to the public affairs office, Submarine Base New London.

Eject...

Eje

It's a call every Navy squadron prays it never receives. It's the type of call Navy emergency rooms prepare for every day. On March 31, 1998, the call came in.

An S-3B *Viking* aircraft assigned to Sea Control Squadron (VS) 41, San Diego, had crashed off the coast of Southern California during a routine training mission. Four Sailors had ejected and were in the water. Search and rescue (SAR) helicopters were in the air.

That was it. That was all they knew as the Emergency Department at Naval Medical Center San Diego went on full alert.

Within minutes, ambulances were dispatched to the hospital's helo pad to await the arrival of the aircrew.

In the emergency room (ER), a special trauma response team, headed by CAPT William Roberts, the ER department chairman, began to take shape.

"With the advance notice we had," Roberts said, "we were able to assemble a multi-disciplinary team made up of emergency physicians, nurses, corpsmen and surgeons."

It was already a busy day in the ER, with every bed filled, but the staff worked quickly to make room for four more inbound patients.

The doctors were prepared to face three major areas of concern. The first was any major injuries to the aircrew, including internal trauma, caused by the sudden and explosive ejection from the aircraft. They must be ready to treat injuries ranging from lacerations to broken bones to severe damage to vital organs such as the lungs, heart or kidneys.

The second was hypothermia. No one knew how long the men had been in the water. Prolonged exposure, even in waters off Southern California, would lower the men's body temperatures and send them into severe shock.

The third was water aspiration, a

Eject!

By JO1 Joe Parker

Navy Medicine goes on red alert.



Emergency personnel rush an aircrew member from the downed S-3B *Viking* to the medical center's emergency room following an at-sea rescue off the coast of Southern California.



An emergency medical technician (EMT) prepares the proper dosage of medication for injection.

Doctors review the results of the MRI.

Photos by JO1 Joe Parker

For Sailors worldwide, it's comforting to know that Navy medical personnel are ready, no matter what the situation.

"It was an inspiring situation to watch as all three critical elements of the ER came together."

HM2(SW/FMF) Roberto Rodriguez

condition where water is ingested into the lungs, causing the victim to continue to drown even after having been pulled from the water. It can occur to unconsious victims even when wearing life vests.

As the physicians reviewed plans to handle any contingency, the radiology department worked quickly to provide extra technicians and portable x-ray while units they readied the CAT scanners for immediate use.

Elsewhere, the hospital's laboratory prepared to provide rapid turnaround on blood tests, while patient administration was ready to smooth the admissions process.

A chaplain stood by hoping beyond hope that his services would not be needed.Throughout the medical center, people and equipment were ready for the worst. Minutes later, the ambulances arrived.

As the four aircrewmen were rushed into the ER, each received an immediate trauma evaluation from the waiting teams of emergency physicians, nurses and hospital corpsmen.

Initial examinations were completed and a feeling of relief spread throughout the team's members. This aircrew on this day had been lucky. The ER team had been ready for a life-or-death situation, but they found only minor injuries.

"The teams responded extremely well," said Roberts. "I don't think I could have asked for a better response."

"We go through a lot of skills training, mock codes and drills to make sure we're ready for situations like this," said Hospitalman Jennifer Young, who was with the first ER ambulance crew to meet the incoming search and rescue helicopters. "This was a case where my Navy training really paid off," she added.

"It was an inspiring situation to watch as all three critical elements of the ER came together," said HM2(SW/FMF) Roberto Rodriguez, a leading petty officer in the emergency department. "The nurses, doctors and corpsmen worked together as one team to achieve the ultimate goal, which is saving lives."

"We were standing by," Roberts added, "ready to assist when their training mission took these four gentlemen in harm's way."

For Sailors worldwide, it's comforting to know that Navy medical personnel are ready, no matter what the situation.

Parker is a journalist assigned to the public affairs office, Naval Medical Center San Diego.



Magnetic resonance imaging (MRI) is a non-invasive procedure designed to give doctors a complete inner-picture of the patient. Unlike a standard x-ray, the MRI gives a three-dimensional image of the affected area.



Ambulances are equipped with vital life-saving devices such as defibrillators, respirators and oxygen cannisters to keep a patient stable while in transit as well as monitoring equipment to provide a steady flow of information to the emergency room awaiting the patient's arrival.

By JO2 Jeremy Allen

Navy's newest medical breakthrough cuts risk of tissue rejection

You wake up one morning and realize you just don't feel right. Your stop by sick call turns into a full-fledged examination and a lab work-up. After weeks of tests, you are informed that your kidneys are deteriorating and you need an organ transplant.

Awash with denial and fear, you remember the sad stories about those people who never found an organ donor and ran out of time. As the thoughts of transplant waiting lists, operations and dialysis fill your head, you're interrupted by a doctor's voice saying, "There may be a better way."

A new therapy was developed and is undergoing tests by a team of Navy doctors and hospital corpsmen (HM) and their collaborators at the Naval Medical Research Institute (NMRI), Bethesda, Md. The team believes they have found a way to prevent mismatched transplanted organs from being rejected.

As part of their research, CAPT (Dr.) David M. Harlan, LCDR (Dr.) Allan Kirk, HM2 Robert L. Kampen and HM3 Justin D. Berning have transplanted purposely mismatched kidneys into rhesus monkeys and treated them with the new therapy for as little as 28 days. Up to one year later, the primates are still doing well and have had no side effects.





lation



HM2 Robert L. Kampen, a native of New Orleans, preparesa buffer solution on the high pressure chromatograph machine. The device measures wavelengths of light to determine DNA amounts in the solution.

Photo by PH2 Joseph Gunder III

Under normal circumstances, the body detects transplanted organs as invaders. The immune system activates its defenses to destroy the invader and, if unaided, the transplanted organ is killed. By modifying the response of the body's T lymphocytes, or T-cells, the Navy research team has found a way to suppress the immune system by reeducating it to leave the organ alone.

"A T-cell is sort of like a guard," explained Kirk, principal investigator for the Immune Cell Biology program at NMRI. "Through molecular interaction, T-cells constantly monitor the body for infection. When a new organ or skin graft, is introduced, T-cells may recognize the new organ as something foreign and order its destruction. The team's new drug blocks the "On" and "Off" switches that all T-cells have to order the attack against the new organ.

Kirk and Harlan, believe that in addition to preventing organ transplant rejection, their research may provide help for immune system illnesses ranging from hay-fever to multiple sclerosis and lupus.

"Currently, transplantation is only successful because we use potent drugs to suppress the body's immune system," said Kirk. "There are multiple drugs that have to be combined to prevent rejection. They protect the organ but they prevent the body from fighting off infection."

Navy-supported medical research efforts have influenced the civilian practice of medicine, assisted the Ministries of Health in developing nations, and provided technology for other federal initiatives.

HM3 Justin Berning, a surgical technician assigned to Naval Medical Research Institute, Bethesda, Md., inserts a fresh blood sample from a primate into the centrifuge to separate the serum from the red blood cells.



Photo by PH2 Joseph Gunder III

The current use of anti-rejection drugs limits the overall usefulness of transplantation during war time, explained Kirk. "If you lost a limb or organ in combat your body couldn't tolerate these traditional drugs in a combat setting.

"The major reason we're here is to give Sailors and Marines the best care possible. I envision that anyone who loses a limb could actually have it replaced with this therapy."

The team is conducting the necessary animal experiments required for this work to move on to human studies. Kirk anticipates doing the first organ transplant with this therapy in humans within the next year.

Their discovery is continually breaking new ground. "One of the reasons we are doing so well is because of the support we have received from the Navy," said Kirk, "and because of people like Kampen and Berning."

Kampen and Berning are the only two enlisted members assigned to NMRI's transplant research lab and are an integral part of the team's success. "I'm the molecular biology guy," said Kampen. "Without my data we can't proceed."

Working with cutting-edge technology and handling primates is just part of their duties. For Berning it's a bit more personal. "It kind of hits home because I had a grandmother who had a similar problem but I couldn't do anything about it."

This is the kind of personal approach that keeps the team working extra hard for its success. "We get letters and email everyday from people asking for our help, wondering when we're going to start our clinical trials on human patients," said Berning. "This gives you more initiative to work harder and get it done."

"I write on the board how many people died waiting for organs because we're not through," said Kirk. "I figured 10 people die every day because we're not done. I feel very responsible for every individual that can't benefit from this till we're done."

According to Kirk, a program this large normally would take years to implement if it weren't for the support of the Navy and the dedication of these two hospital corpsmen. "This is an example of the scope of the Navy," said Kirk. "The Navy offers extraordinary opportunities. We don't just protect the United States; we make living here better.

Allen is a photojournalist assigned to All Hands.

- **Nationwide there are 55,700 PEOPLE WAITING FOR ORGANS. Of that total, 37,000 are waiting for a kidney.**
- **ONE SAILOR EACH WEEK has a life-threatening burn in the line of duty that is ungraftable.**
- **In the last five years, 250 ACTIVE-DUTY MEMBERS have died from untreatable burns.**
- **According to the United Network for Organ Sharing, which tracks organ transplant data, ALMOST 4,000 AMERICANS DIED IN 1996 WAITING FOR A COMPATIBLE ORGAN DONOR. Thousands more suffer from anti-rejection drugs while they wait for an organ match.**



For more information on NMRI's research, check out their homepage at www.nmri.nnmc.navy.mil or www.dmso.mil/NMRDC.

By LT Edie Rosenthal & JOSN LeaVonda Battle

Rx for Healthy Living

Did you know ...

Most unfit people suffer from lack of energy, lack of physical strength and inability to relax and enjoy life.

Modern medicine has eradicated many diseases and illnesses, but health problems continue to plague our society. Approximately one in five Americans suffer from high blood pressure and 76 percent are considered overweight. Despite the fact that almost a half million Americans died in the past year of smoking-related illnesses, 152,000 Sailors continue to smoke and about 63,000 use smokeless tobacco. Although Sailors are relatively healthy, 4,192 have been discharged in the past three years for obesity, and another 1,947 have been discharged for not being able to pass the Physical Readiness Test (PRT).



But help is out there. Navy Medicine has the prescription for helping Sailors to stay fit and in the Navy. Wellness Centers and Health Promotions offices are cropping up all around the fleet. Navy Wellness Centers and Health Promotions Offices provide a myriad of services to help Sailors and their families adopt a healthy lifestyle to include nutrition and smoking cessation classes, stress reduction and low-fat meal planning and aerobic exercise programs. The Navy has 5 Wellness Centers and 35 Health Promotions Offices. Although the programs vary from location to location, the goal remains the same—to keep Sailors healthy and fit.



The latest trend is bringing Wellness Centers and Health Promotions Offices closer to the base gym or fitness center. Last May, the Navy opened its first newly constructed Wellness Center attached to the MWR fitness center at Jacksonville, Fla."Having the facility here is a fantastic benefit for the Sailors," said HM2 Jessie Karstedt, the leading petty officer at Naval Hospital Jacksonville Wellness Center. "Mainly because we are correlated with the Physical Training Department." Karstedt added that the health education and training the center provides reduces heart attacks, risks for cancer and PRT failures.

What's the number 1 cause of death for women in the U.S.?

Heart attacks and heart disease-related illness.



Naval Hospital Jacksonville's award-winning Wellness Center provides a full line of services, from cholesterol reduction classes to health and fitness analysis, and even offers a three-day "wellness camp."

Wellness Camp

Say the words "wellness camp" and some people envision a pricey fat farm where people go to steam away cellulite and get a rub down by a masseuse named Sven. Well, the Wellness Center at Jacksonville, Fla, doesn't have a masseuse named Sven, but it does offer its participants massage therapy as part of its three-day wellness retreat.

"While most people will agree that they would like to be healthier, some just don't know how to achieve that lifestyle or have been mislead by the numerous myths about fitness," said CDR Debbie McKay, Director of the Wellness Center. Instead of providing a quick fix, the wellness camp offers a more holistic, mind-body approach to fitness.

"There's more to fitness and nutrition than losing ten pounds, eating a low-fat meal or exercising five times a week," said McKay. "Being fit is about living a more healthful and mindful life, 24 hours a day—from the way we work and interact with others to the way we recreate, relax and sleep."

The Wellness Center offers a three-day wellness camp retreat twice per year. Participants undergo a full health and fitness appraisal, bodyfat testing and cholesterol screening. They participate in group aerobic activities and are treated to delicious low-fat meals prepared by local chefs. They also receive massages from local massage students. It is an experience designed to lead the participants down the road to healthier living.

According to class participant LCDR Alan Miller, Naval Hospital Jacksonville Urology Department Head, "Anytime you can learn more about taking care of yourself you have the opportunity to make your life better and that's exactly what I am doing here. The camp is teaching me what I need to change, and how to work towards that desirable goal."

For many, the wellness center brings hope—hope that they can turn around some unhealthy habits and live a healthier life.

"When I was on the ship, I would just eat whatever they served me, not thinking about the nutritional value," said SHC Gwendolyn Brown, assigned to NAS Jacksonville. "Coming from the fleet, I really enjoyed the relaxing environment of the wellness camp. It was an awesome experience. It has changed my concept of good nutrition and now I make better food choices for myself and my family."

What's the number 1 sport in America?

According to studies by the National Sporting Goods Association, fitness walking is practiced by some 71.2 million Americans over the age of 7.

Being out of shape is hazardous to your health

With the introduction of the new Physical Readiness standards, Sailors who have let their fitness slide may be risking more than their health.

Secretary of Defense William Cohen made it very clear recently that he wants his military forces in the "best possible physical condition." Being unfit has a direct affect on one's mind and body.

Wellness programs maximize readiness by creating healthy, deployable warfighters.

"Sailors need to think about the quality of life they are trying to sustain. It's easy for young people to think they are going to live forever," said CDR Don Williamson, the head of the Nutrition Management Department at Naval Hospital Jacksonville. "So they take for granted the foods and substances they put in their bodies. If you are smoking and drinking and living a life without exercise, good nutrition will not make a big difference. You need to change your lifestyle."

The first step in reversing poor lifestyle habits is to identify health habits that need changing, such as poor diet, smoking, drinking alcohol to excess, and not exercising. Dietitians and other health educators are good sources of information and can help you with setting your priorities for change.

Dietitians

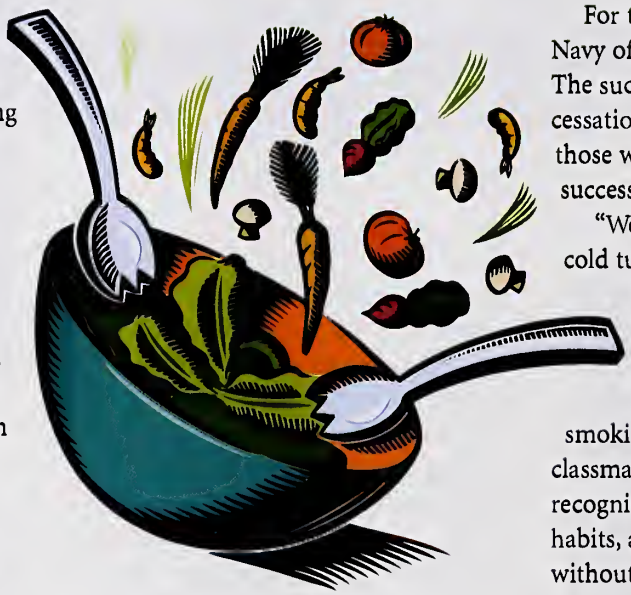
The Navy has 47 registered dietitians serving all over the world to assist Sailors and their families with nutritional education, weight loss, remedial physical training and menu planning.

"People need to be informed nutrition consumers in the market place," said Williamson. "They have to realize that there is a lot of information out there, some of it is good. However, there is also a great deal of false information. Salesmen aren't interested in your health. So you, as a consumer, need to learn how to read labels and cook healthier meals."

Menu planning is one of the most important things that dietitians teach. Like the chefs that prepare low-fat gourmet meals for the wellness camp, dietitians offer alternatives to high-fat meals.

5 a Day for Better Health

Those people who consume at least 5 servings of fruits and vegetables are at approximately half the risk of cancer than those who consumed fewer than two servings per day.



Low fat and healthful recipes are posted at the Navy's Environmental Health Center website at http://www.nehc.med.navy.mil

Click on Health Promotions and look for the "Recipe of the Week."

Tobacco Cessation

"Tobacco contains more than 4,000 different chemicals. More than 40 of these substances have been identified as cancer-causing, yet people continue to use tobacco," said Lisa Goldstein, a health educator at the Wellness Center.

For those who truly want to quit, the Navy offers smoking cessation classes. The success rate for those who attend a cessation class is about 40 percent. For those who try to quit on their own, the success rate is only about 5 percent.

"We don't expect everyone to quit cold turkey," said Goldstein. "However, the class provides nicotine replacements, behavioral strategies to change habits that normally coincide with smoking, as well as support from fellow classmates. We teach the students how to recognize what triggers their smoking habits, and how to deal with life without smoking."

Change

Permanent change doesn't happen overnight. "Being ready, willing and able is an essential first step," said McKay. "Unless you're motivated for change, no one can force you to. Your health is in your hands."

Rosenthal is the publishing division officer, Naval Media Center, Washington, D.C. Battle is assigned to Naval Hospital Jacksonville, Fla.,

Navy Wellness Centers:

Jacksonville, Fla.
Lemoore, Calif.
Brunswick, Maine
Roosevelt Roads, Puerto Rico
Sewells Point, Va.
Under Contruction sites:
Mayport, Fla.
Great Lakes, Ill.
Keflavik, Iceland

By JOSN LeaVonda Battle

Robby the Robot Improves Customer Service

Robby, a new employee at Naval Hospital Jacksonville's Pharmacy Department, can fill 250 prescriptions an hour, work seven days a week and handle 24-hour shifts without any breaks.

Robby is a robot and an automated pill dispenser, responsible for handling 70 percent of the 20,000 refills that come through the pharmacy every month. Working for the second busiest pharmacy in the Navy, Robby has tremendously improved customer service at the hospital.

Robby is part of an overall customer service initiative that allows patients to get their medication in a timely manner. In the past, patients had to wait extended periods of time, in long lines, while pharmacy technicians scrambled to fill their prescriptions. Concerned with the waits, the hospital built 12 customer service windows and put Robby in place for refills.

Thanks to Robby, patients can call in their refill prescriptions the night before and pick them up at the drive-through pick-up center located in the hospital's parking lot. Patients never leave their cars when they pick up their medication.

As patients phone in the refill orders, Robby checks for remaining refills, counts pills and puts them into bar coded bottles, which he also creates. Each prescription is sorted by name and double checked to ensure the right medicine gets to the right patient. Robby then rushes the medicine to pharmacy technicians, who bag and load the orders onto a cart for transport to the drive-through pick-up center for distribution.

Although this hi-tech automated genius has improved the hospital pharmacy department, his human co-workers are still fully employed, filling the new and special-order prescriptions. Having Robby around has given technicians the freedom to work with patients and cut the waiting time for new prescriptions from hours to minutes.

According to Bill Droste, a pharmacy technician in the hospital and system administrator for the robot, "Everyone is glad to have him here. He allows us to focus our attention on improving customer service for patients."

Battle is assigned to Naval Hospital Jacksonville, Fla.



Photo by JOSN LeaVonda Battle

Robby's assistant, HN Heather Moran, a pharmacy technician at Naval Hospital Jacksonville, makes sure he is working properly.

Vacation GlobeTr

Shades of Green

(Lake Buena Vista, Fla.)

Shades of Green on Walt Disney World Resort is a full-service hotel with 287 rooms decorated in country-inn style. The hotel has two heated swimming pools, a children's pool and play area, lighted tennis courts, a small fitness room as well as a video arcade, gift shop and laundry facilities. Guests receive discounts on theme park tickets and complimentary transportation to Walt Disney World. Two PGA championship 18-hole golf courses and a nine-hole executive course are just outside your door. The Garden Gallery restaurant is open for breakfast and dinner; the Evergreen Lounge, with its view of the pool, is open from lunch until well past the cocktail hour.

Telephone number: **(407) 824-3665**
Rates range from: **$59 to $98**
Eligibility: **Active/Retired/Reserves/ DOD civilians**



Big Bear Recreation Facility

(Big Bear Lake, Calif.)

Big Bear Recreation facility is located 7,000 feet above sea level between the Snow Summit and Bear Mountain ski resorts in the San Bernardino National Forest. The facility offers excellent fishing, boating, hiking and skiing opportunities.

Telephone number: (714) 726-2626/2527
Rates range from: $12 and up
Eligibility: Active/Retired/Reserves/DOD civilians



PHOTO COURTESY OF BIG BEAR RECREATION FACILITY

otters





PHOTOS COURTESY OF DISNEY WORLD

Grant's Village, Yellowstone National Park

(Yellowstone National Park, Wyom.)

Located in the heart of Yellowstone National Park, the camp is less than one mile from Yellowstone Lake, which has a marina with boat launching facilities.

Grant's Village provides easy access to Old Faithful geyser, Grand Canyon of Yellowstone, Mammoth Hot Springs, Teton National Park, Jackson Hole and many other attractions.

Telephone number: (208) 828-6333
Rates range from: $36 and up
Eligibility: Active/Retired/Reserves/DOD civilians



PHOTO COURTESY OF WYOMING DIVISION OF TOURISM

A pair of gloves, a flat board, and miles of fresh powder to shred.

Seward Resort
(Seward, Alaska)

This picturesque 12-acre site is surrounded by mountains and pine trees. There's an abundance of superb fishing for salmon, halibut, snapper, ling cod, black bass, flounder, and trout. If you travel in late July to mid-August, you'll see salmon spawning areas on your drive to the resort.

Telephone number: (907) 384-1110
Rates range from: $50 and up
Eligibility: Active/Retired/Reserves/DOD, Naval Air Facility and Contract civilians



PHOTO COURTESY OF MILITARY LIVING

Cape Hatteras Recreational Quarters
(Buxton, N.C.)

Cape Hatteras Recreational Quarters is located on the Outer Banks of North Carolina in Cape Hatteras National Seashore. There is a beautiful bathing beach and plenty of ocean fishing and water sports. The site of the famous Wright brothers' first airplane flight is just 50 miles north. Sorry, there's no camping or RV parking.

Telephone number: (919) 995-3676
Rates range from: $25 and up
Eligibility: Active/Retired/Reserves/DOD civilians

Chiemsee Armed Forces Recreation Center

(Chiemsee, Germany)

Chiemsee Armed Forces Recreation Center is situated along the shores of Lake Chiemsee, Bavaria's largest lake, directly off the Munich-Salzburg Autoban (A-9) southeast of Munich. The family can enjoy a variety of water sports or take advantage of the nearby Cheimgauer Alps offering scenic panoramas and opportunities for skiing, hiking and hang gliding.



PHOTO COURTESY OF MILITARY LIVING

Telephone number: **011-49-8821-72981, (US) 011-49-8821-3942**
E-mail: **vacation@afrc.garmisch.army.mil**
Rates range from: **$44 and up**
Eligibility: **Active/Retired/DOD civilians assigned overseas**

PHOTO COURTESY OF AFRC GARMISCH

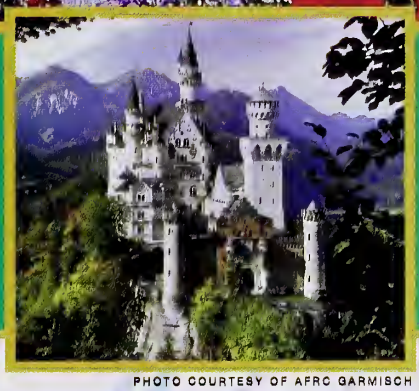


PHOTO COURTESY OF AFRC GARMISCH

Pine View Recreation Area

(Fort McCoy, Wis.)

Pine View Recreation Area is a beautiful wooded area bounded by Squaw Lake and LaCross River. The eleven small lakes on the post are ideal for fishing. Squaw Lake is stocked with rainbow trout. Ski slopes and groomed snowmobile trails are available during the winter months.

Telephone number: (608) 388-3517
Rates range from: $30 and up
Eligibility: Active/Retired/Reserve/National Guard/DOD and Naval Air Facility civilians

Short Stay Navy Outdoor Recreation Center

(Moncks Corner, S.C.)

So you don't have a lot of time on your hands, but you want a vacation? Short Stay Navy Outdoor Recreation Center and its 44 two- and three-bedroom Lakeside Villas may be the place you're looking for. Situated on a 55-acre peninsula at the southern tip of Lake Moultrie, this facility has excellent freshwater fishing and family programs as well as activities such as boating, camping and swimming.

Telephone number:
(803) 761-8353 or 1-800-447-2178
Rates range from: $18 and up
Eligibility: Active/Retired/Reserves/ DOD civilians

Fort Tuthill Recreation Area

(Flagstaff, Az.)

Fort Tuthill Recreation Area is the closest military location to the Grand Canyon. It's located between Yuma and Phoenix, areas that enjoy pleasant winter weather. Mexico and mountain areas are within driving range. Enjoy a wide-range of accommodations as well as a variety of activities that include boating, hunting, mountain biking and skiing.

Telephone number:
(620) 856-7990 or 1-800-552-6268
Rates range from: $35 and up
Eligibility: Active/Retired/Reserves/ DOD civilians

Jim Creek Regional Outdoor Recreation Area

(Arlington, Wash.)

Jim Creek Regional Outdoor Recreation Area boarders the Mt. Baker-Snoqualmie National Forest and the Boulder River Wilderness Area. Located in the foothills of the North Cascades about one hour north of Seattle, Jim Creek has more than 5,000 acres — mostly wilderness, with a wide variety of recreational opportunities. Twin Lakes, famous for great fishing, canoeing and wildlife viewing, is home to 250 acres of Old Growth forest and is accessible by hiking.

Telephone number: (360) 435-7433
Rates range from: $12 and up
Eligibility: Active/Retired/DOD civilians



U.S. NAVY PHOTO

Barbers Point Recreation Area

(Barber's Point, Hawaii)

Barbers Point Recreation Area is a small facility located on the southwest coast of Oahu, 13 miles east of Pearl Harbor and 29 miles east of Honolulu. Beaches are excellent for surfing and nearby attractions include the following: Pearl Ridge Phase I and II, Ala Moana Park, Wainae Beach parks, Pearl Harbor Park and the Ice Palace (skating).

Telephone number: (808) 682-2019
Rates range from: $35 and up
Eligibility: Active/Retired/DOD civilians on Barbers Point

Destin Army Infantry Center Recreation Area

(Destin, Fla.)

Destin Army Infantry Center Recreation Area is located on a 15-acre site on Choctawhatchee Bay in Destin Florida. Vacationers can enjoy sparkling, white-quartz sand along the Emerald Coast. The Gulf of Mexico's fishing and swimming areas are approximately two miles from the recreation area. The facility also offers golf at six public golf courses, two greyhound race tracks within 45 miles, Destin Fishing Museum, Gulfariam, Zoo and Indian Temple Mound Museum.



U.S. ARMY PHOTO

Telephone number: (904) 837-2725 or 1-800-642-0466
Rates range from: $38 and up
Eligibility: Active/Retired/Reserve/National Guard/DOD civilians

Uchee Creek Army Campground/Marina

(Columbus, Ga.)

The Uchee Creek Army Campground/Marina is located along the Georgia-Alabama border. Uchee Creek is a place where families can spend a weekend or an entire vacation enjoying the natural beauty of the countryside. Fishing, hunting and boating are popular activities.

Telephone number: (706) 545-4053/7238/5600 or 1-800-642-0466
Rates range from: $18 and up
Eligibility: Active/Retired/Reserve/National Guard/DOD civilians

Solomons Navy Recreation Center

(Solomons, Md.)

Solomons Navy Recreation Center is located in southern Maryland where the Patuxent River meets the Chesapeake Bay. This rustic and relaxing area offers natural beauty on about 260 acres of land with extensive river frontage. The campground and facilities offer fishing, swimming pools, tennis and sports fields and lots more.

Telephone number: (410) 326-1260
or 1-800-NAVY-230
Rates range from: $34 and up
Eligibility: Active/Retired/Reserve/
DOD civilians

Canyon Lake Recreation Area

(Canyon Lake, Texas)

Canyon Lake Recreation Area is nestled in the scenic hill country between San Antonio and Austin. Canyon Lake has 80 miles of that soft, sandy shoreline found only in central Texas. The nearby Fort Sam Houston Recreation Area includes 300 feet of sandy beaches and a marina.

Telephone number: (210) 964-3318
or 1-888-882-9878
Rates range from: $35 and up
Eligibility: Active/Retired/Reserve/DOD
civilians/National Guard/Foreign Military

New Orleans NAS/JRB Campground

(New Orleans, La.)

Just minutes from the famous French Quarter and downtown New Orleans, the New Orleans NAS/JRB Campground offers golf, swimming, tennis and hunting.

Telephone number: (504) 678-3448/3142
Rates range from: $15 and up
Eligibility: Active/Retired/Reserve/
DOD civilians



The Hale Koa Hotel

(Honolulu, Hawaii)

The Hale Koa Hotel is an affordable, year-round resort for military guests and their families. It's located on Waikiki Beach. Facilities include 814 first-class rooms, three fresh water swimming pools and complete beach facilities, plus a wide variety of restaurants, lounges and dinner shows.

Telephone number: **(808) 955-0555**
or 1-800-367-6027
Rates range from: **$53 and up**
Eligibility: **Active/Retired/ Ready and Selected Reserve personnel with red/pink ID card and family members. Retired Reserve/National Guard personnel with gray/blue ID card. Senior ROTC Cadets on extended active duty.**



PHOTOS COURTESY OF HALE KOA HOTEL

cheap

By JO2 Joshua Hudson

Every month as I gingerly hold my "Leave and Earnings Statement" in my hand, I almost giggle as I look at the top left hand corner. *I have saved up a sizable chunk of leave in the past year. I can look forward to a nice, relaxing vacation*, I think to myself.

Then I look down a bit and frown as I realize that my paycheck won't pay for that trip to the islands. It won't even pay for a trip to the "Quickie Mart."

It is a problem that most of us have. The Navy gives us 30 days of leave but many of us don't have the cash-flow to enjoy it.



But I was determined to have a good time, so I did some research to find the cheapest way out of town. When I was stationed overseas, I picked up a few tricks. So I decided to use them.

For starters, there are military Air Mobility Command (AMC) Space Available (Space-A) flights all over the world.

Twice a week, flights leave from Norfolk and Philadelphia heading to Europe. There are five or six daily flights leaving Dover AFB, Del., to Germany and England. The only drawback to flying Space-A is the wait. It may last 12 to 14 hours for someone in a Category 3 (regular leave status), but the savings could be more than $1,000. The key is flexibility. AMC is an option the military offers to defray the costs of vacations, but it is only one of many.

If waiting at the AMC terminal isn't for you, plan a trip to your local bookstore. There are hundreds of books on travel and vacations with information on what you need for a great vacation at minimum cost.

The real trick to saving money is research.

According to many travel guides, most of us take our vacations in the summer. Most major attractions, such as amusement parks or state parks have a Kampgrounds Of America <www.koakampgrounds.com>, national park service <www.nps.gov> or some other area where you can pitch a tent for as little as $10 a day.

If the great outdoors isn't your idea of a place to rest, check out your local college or university. Many schools allow dorm rooms to be rented while students are home for the summer. Prices can be as low as $6 a night and children usually aren't charged if they sleep in the same room as a parent. This also applies to schools in countries in the southern hemisphere, like Australia, where school is out during the winter months.

If the dorm is full, there's always the Young Men's Christian Association. The YMCA offers an inexpensive alternative to a big name hotel. A single room is about $20, and doubles go as cheap as $35 a night.

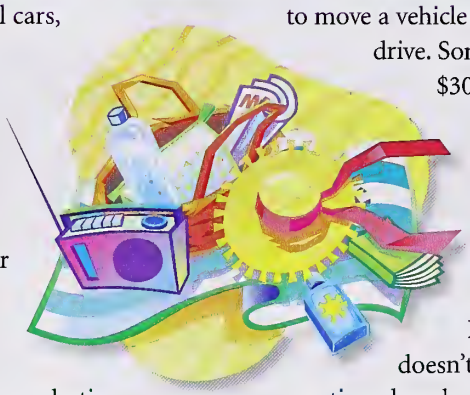
Believe it or not, there are even less expensive lodgings available if you know where to look. For a small membership fee you can join Hosteling International. There are 6,000 hostels in 70 countries and more than 200 in the United States. Prices vary from $5 to $22 a day and kids get discounts. Each hostel is unique, but guests usually share dorm-style sleeping rooms and community showers. Most hostels have kitchens, so the cost of eating out can be avoided. Non-members are welcome, but there is an additional fee.

Travel

If you really want to sleep "free," there are some people who will swap living quarters with you during the holidays. It is called "Vacation Home Exchange." Approximately 20,000 travelers swap homes each year. The trick is to have an apartment or a home in a location that another person would want to visit. There are more than 40 exchange clearinghouses in the United States, and there are systems in place to ensure that you don't lend your house to the wrong family.

Clearinghouse-type travel agencies also offer inexpensive, last-minute packages with low airfares. They can be found in the back of most travel magazines and on the Internet. The Chicago Tribune conducted a survey and found that savings averaged 30 percent for rooms, air fares, and rental cars, compared to your normal travel agencies.

You could even become an air courier. Call some of the courier companies in the phone book and ask them if they need a courier to your destination. In exchange for some of your baggage allowance, they will usually pay 25 percent of your air fare. The discount can range from 50 to 100 percent if your destination is flexible.



Another choice in locating cheap travel is finding a family or business that needs to move a vehicle but doesn't want to drive. Sometimes they will pay $300 for someone else to drive it to a specific destination. There are deadlines and refundable deposits but your trip costs you only food and gas.

Low-cost vacationing doesn't mean you have to vacation cheaply. But whether you sleep under the stars, or in a four-star hotel, there's no reason why you can't make that 30 days of leave fit your budget.

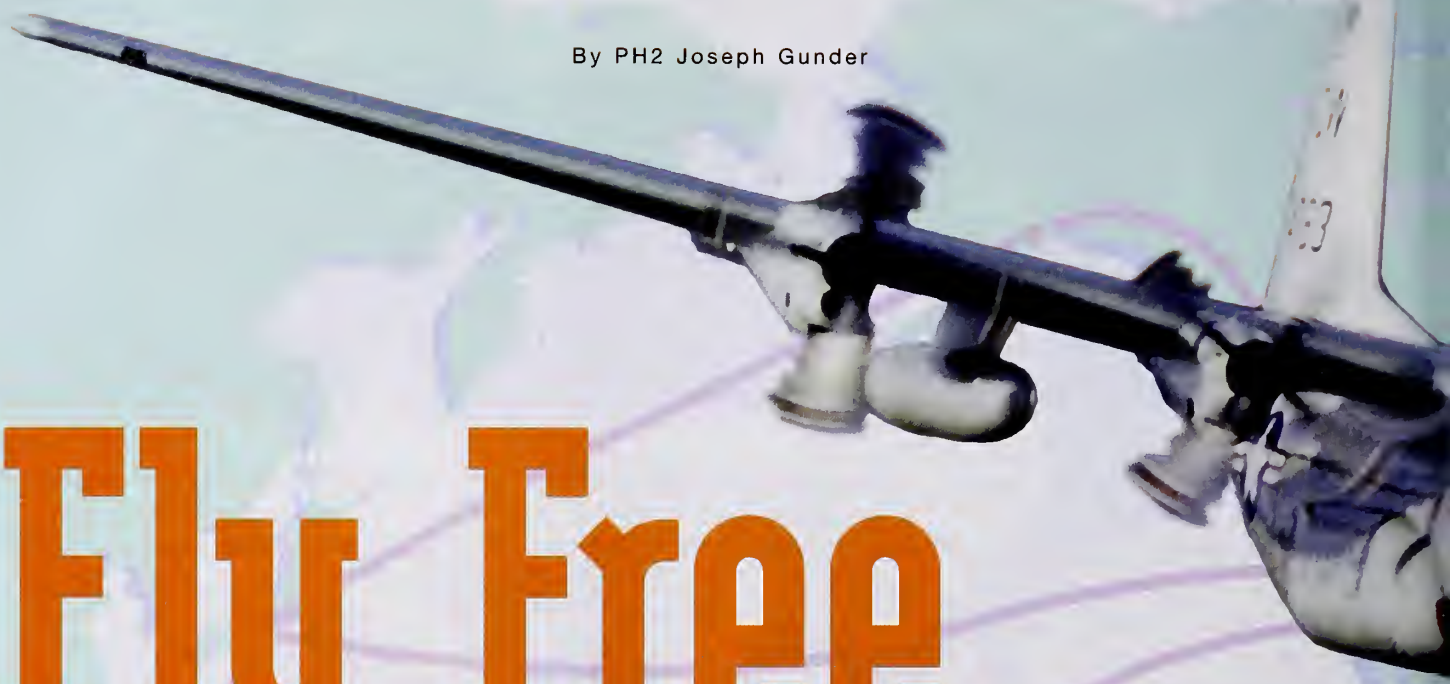
Hudson is a journalist assigned to Naval Aviation News.

SIX HELPFUL AVENUES TO A CHEAPER TRIP

1. "The U.S. & Worldwide Travel Accommodation Guide for $12 to $24 a day;" Campus Travel Service, P.O. Box 5486, Fullerton, CA 92635; (800) 525-6633; www.budgetlodging.com, www.campus-lodging.com
2. "The Y's Way" - a guide to YMCAs across America; YMCA, 224 E. 47th St., New York, NY 10017; (212) 308-2899; www.ymca.net
3. Hostel International, 733 15th NW #840, Washington DC 20005; (202)783-6161; www.hostels.com; www.hiayh.org; www.traveloco.com/hostels
4. "Trading Places: The Wonderful World of Vacation Home Exchanging;" www.stay4free.com; www.homelink.org; www.houseswap.com
5. Making Reservations
   - RMC Travel Center (800) 782-7666
   - Quickbook (800) 789-9887
   - Accommodations Express (800) 444-7666
   - Central Reservations http://132.25.192.53 (800) 950-0232
6. Travel links:
   http://www.travelcity.com
   http://bestfares.com
   http://www.militaryliving.com
   http://www.amtrack.com
   http://www.greyhound.com



By PH2 Joseph Gunder



Fly Free... Almost

A petty officer, his wife and two children fly all the way from Baltimore/Washington International (BWI) Airport to Naples. A week later they fly back. Total cost for the trip... $36. That's $12 to leave and $24 to come back. Is that possible? — A round trip flight from the United States to Europe for $36?

It is possible when you're flying military "Space-A." According to Chapter 6 of DOD Instruction 4515.13R, seats that are surplus, after all other required passengers have been accommodated, are offered to active duty members, some DOD civilians, military retirees and their families. That $36 is for customs and immigration fees. There is no air fare.

Space-A is slightly different than flying commercial air. For instance, you may not get the super deluxe reclining seat or the latest blockbuster attraction. And you may have to fly on a C-130, which can be loud, a bit chilly and smell like jet exhaust. All you will have for company is the aircrew and a bunch of crates strapped to the deck, but hey, it's cheap — if not free — and going your way!

"This is Space-A, not a reservation system," said Leroi Bonelli, a customer service agent at the Air Mobility Command terminal at BWI Airport. "Be patient. You won't always get out," added Bonelli. "Be on leave. Have orders in hand, an ID card and passports for your family members. Have your bags tagged and waiting. If your name is called be travel ready."

"To sign up, some places require the member to appear in person, others accept a fax of leave papers and still others use e-mail. But the member must already

be on leave. For example, if your leave starts at 5 p.m. on Thursday, the 7th, you can't sign up for a flight any earlier than the start time of your leave authorization," said Bonelli.

There are other stipulations to flying Space-A. According to Bonelli, any Space-A passenger, except those in category 1 (see table) can be "rotated" or "bumped" for an official passenger. The Air Transportation Eligibility regulation states DOD is not obligated to continue passengers' travel or return them to their point of origin, or to any other point for that matter. In other words, if you're catching a flight to Capodichino airport in Naples and your plane has a scheduled stop in Rota, Spain, there's a chance you might not be allowed to continue on if there's an official passenger who requires a seat. "Members should carry extra dollars to help with lodging and to buy a commercial ticket, if needed," Bonelli said.

"There was a time when your family members who flew back with their sponsor from overseas had to get off at the first stop in CONUS," continued Bonelli. "Now, they can fly to their intended destination."

Bonelli also mentioned that members should always be mindful of the peak seasons. "The best times for travel are from mid-January to mid-May," he said. "Mid-May to mid-September is the busiest time to travel."

Members stationed overseas in certain remote duty stations can take advantage of environmental morale leave or EML. The idea behind EML is to give members at one of these locations a higher priority for Space-A. But members can still be "bumped" at any leg of their journey for a "space-required" passenger or cargo.

According to Zachary Williams, customer service branch chief at BWI, Space-A passengers cannot "bump" other Space-A passengers regardless of category. "Once you're manifested, the only way you can be bumped is by a duty passenger. Space-A cannot bump Space-A.

With an open mind and a back-up plan to get yourself home on time, flying Space-A can help make your trip one of the cheapest you'll ever take. "If you've only got a week of leave, I wouldn't recommend it," said YNC(SW) Rex Harris of Ft. Myers, Fla. "But if you're going to take a month's leave, I'd do it in a heartbeat."

Gunder is a photographer's mate assigned to All Hands magazine.



Space A Categories

Category I: Civilian or military dependent on emergency leave

Category II: Environmental morale leave

Category III: Active duty on ordinary leave, house hunting TDY

Category IV: Unaccompanied dependents traveling on EML orders without their sponsor, or DODDS teachers on EML during the summer break

Category V: Permissive TDY (non house-hunting), family members, students, foreign military

Category VI: Retirees, Reserves

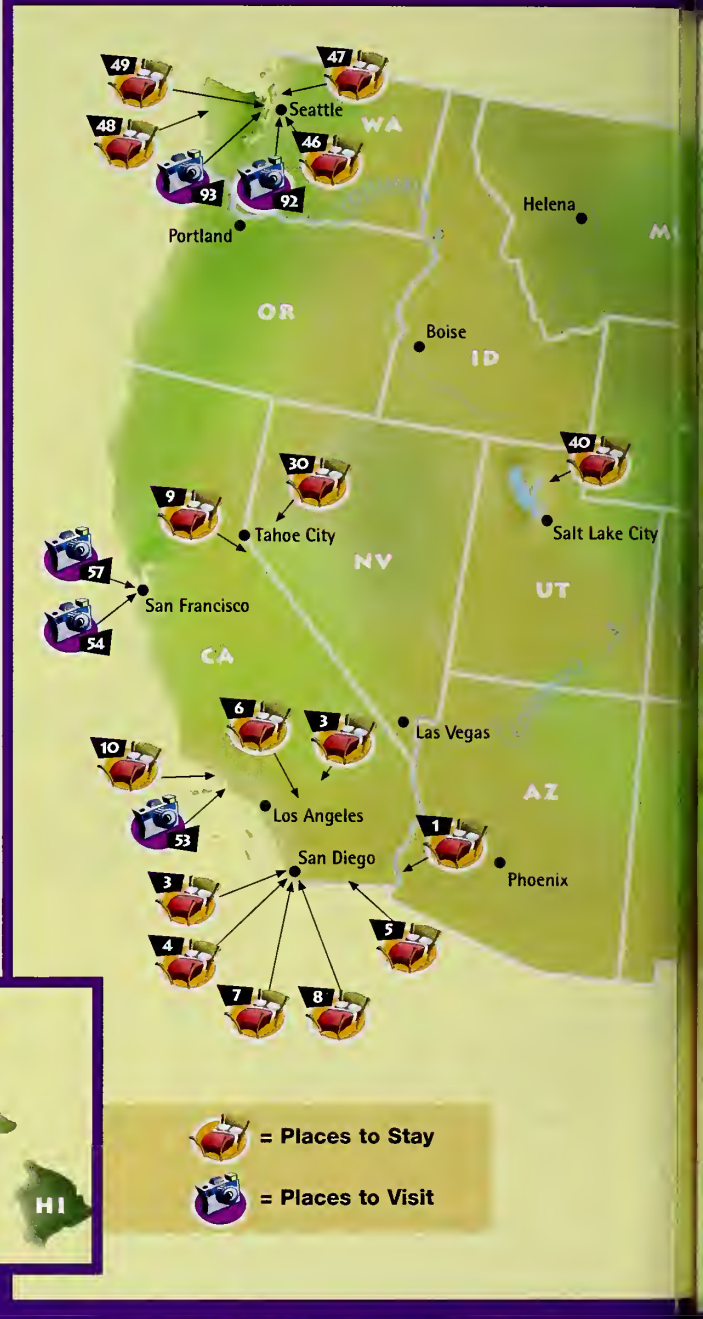


For more information about how to make the best use of Space-A, log on the web at www.scott.af.mil/hqamc/pa.

"Get Up and Go!"

f you've been wondering what you can do on your summer vacation, check out our map. We've tried to list interesting places to go and a few places to stay that won't cost you an arm and a leg. We hope one of them is right for you. Happy travels.

For information on these places and a listing of many more sites, pick up a copy of *Military Living* in the book section of your local Navy Exchange.



PLACES TO STAY

1. Martinez Lake Recreation Area, Martinez Lake, Ariz.
2. Admiral Baker Field Campground, San Diego
3. Big Bear Recreation Facility, Big Bear Lake, Calif.
4. DelMar Beach Cottages/Campsites, Camp Pendleton, Calif.
5. El Centro NAF Campground, El Centro, Calif.
6. El Toro Campgrounds, Santa Ana, Calif.
7. Fiddler's Cove RV Park, San Diego
8. Lake O'Neill Recreation Park, Camp Pendleton, Calif.
9. Lake Tahoe Coast Guard Recreation Facilities, Tahoe City, Calif.
10. Point Mugu Recreation Facilities, Point Mugu, Calif.
11. Blue Angels Naval Recreation Area, Pensacola, Fla.
12. Jacksonville RV Park, Jacksonville, Fla.
13. Lake Fretwell Recreation Area, Cecil Field, Fla.
14. Oak Grove Trailer Park, Pensacola, Fla.
15. Orlando Travel Trailer Park, Orlando, Fla.
16. Panama City Coastal Systems Station Outdoor Recreation/Marina, Panama City, Fla.
17. Sigsbee RV Park, Key West, Fla.
18. World Famous Navy Lake Site, Marietta, Ga.
19. Barbers Point Recreation Area, Barbers Pt., Hawaii
20. Kaneohe Bay Beach Cottages and Campsites, Kaneohe Bay, Hawaii
21. Great Lakes Naval Training Center, Great Lakes, Ill.
22. Crane MWR Campgrounds, Crane Ind.
23. Magnolia Shade Recreational Vehicle Park, New Orleans
24. New Orleans NAS/JRB Campground, New Orleans
25. Sprague's Neck, Cutler, Maine
26. Winter Harbor Recreation Area, Winter Harbor, Maine
27. Goose Creek/West Basin Recreation Area, Patuxent River, Md.
28. Solomons Navy Recreation Center, Solomons, Md.
29. Cuttyhunk Island Recreational Housing Facility, Boston
30. Fallon RV Park and Recreation Area, Fallon, Nev.
31. Barnegat Recreation Cottages, Staten Island, N.Y.
32. Lake Laurie Campground, Willow Grove, Pa.
33. Cherry Point MWR Famcamp, Cherry Point, N.C.
34. Onslow Beach Campsites and Recreation Area, Camp LeJeune, N.C.
35. Carr Point Recreation Area, Newport, R.I.
36. Short Stay Navy Outdoor Rec Area, Moncks Corner, S.C.
37. Navy Lake Recreation Area, Memphis, Tenn.
38. Shields Park NAS Recreation Area, Corpus Christi, Texas
39. Southwinds Marina on Lake Amistad, Del Rio, Texas
40. Hillhaus Lodge, Huntsville, Utah
41. Cheatham Annex Recreation Cabins and RV Park, Cheatham Annex, Va.
42. Little Creek MWR RV Park, Little Creek, Va.
43. Lunga Park, Quantico MCB, Va.
44. Sea Mist Recreational Vehicle Campground, Dam Neck, Va.
45. Stewart Campground, Chesapeake, Va.
46. Cliffside RV Park, Oak Harbor, Wash.
47. Jim Creek Regional Outdoor Recreation Area, Arlington, Wash.
48. Pacific Beach Resort and Conference Center, Pacific Beach, Wash.
49. Rocky Point RV Park, Oak Harbor, Wash.
50. Sugar Grove Cabins, Sugar Grove, W.Va.



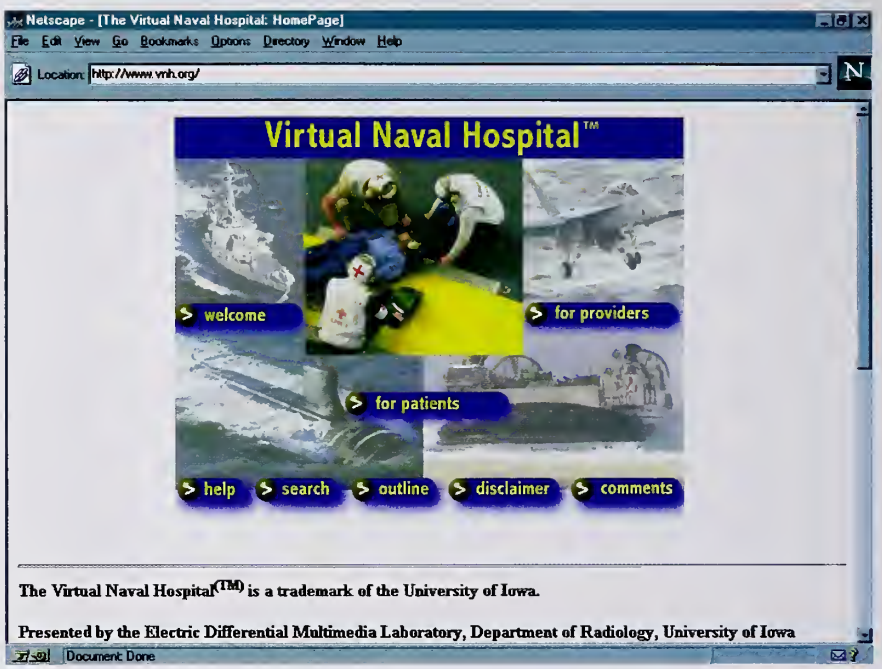
PLACES TO VISIT

51. USS *Alabama* Battleship Memorial Park, Mobile Ala.
52. Angel Island State Park, San Francisco
53. CEC/Seabee Museum, Port Hueneme, Calif.
54. Treasure Island Museum, San Francisco
55. *Nautilus* Memorial/Submarine Force Library and Museum, Groton, Conn.
56. Submarine Library Museum, Middletown, Conn.
57. Navy Memorial Museum, Washington, D.C.
58. Pentagon, Arlington, Va.
59. Combat Art Gallery & Navy Museum, Washington Navy Yard, Washington, D.C.
60. Smithsonian Air & Space Museum and the Museum of American History, Washington, D.C.
61. NASA/John F. Kennedy Space Center, Cape Canaveral, Fla.
62. Naval Aviation Museum, Pensacola, Fla.
63. UDT/SEAL Museum, Ft. Pierce, Fla.
64. USS *Requin* Submarine Memorial, Tampa, Fla.
65. Navy Supply Corps Museum, Athens, Ga.
66. Civil War Museum, Atlanta
67. USS *Arizona* Memorial, Honolulu
68. U-505 German Submarine, Chicago
69. Louisiana Naval War Memorial/USS *Kidd*, Baton Rouge, La.
70. CSS *Pioneer*, New Orleans
71. U.S. Naval Academy, Annapolis, Md.
72. US Frigate *Constellation*, Baltimore
73. P.T. Boat Museum & Library-USS *Massachusetts*, Fall River, Mass.
74. USS *Constitution* Museum, Boston
75. USS *Silversides*, Muskegon, Mi.
76. YP 587 Patrol Craft, Southfield, Mi.
77. USS *Inaugural*, Springfield, Mo.
78. USS *Marlin* & USS *Hazard*, Omaha, Neb.
79. USS *Albacore*, Portsmouth, N.H.
80. USS *Ling* Submarine Memorial & Museum, Hackensack, N.J.
81. *Intrepid* Sea-Air-Space Museum, New York City
82. USS *North Carolina*, Wilmington, N.C.
83. USS *Cod*, Cleveland, Ohio
84. USS *Becuna*, Philadelphia
85. USS *Olympia*, Philadelphia
86. Patriots Point Naval & Maritime Museum, Charleston, S.C.
87. Battleship *South Dakota* Memorial, Sioux Falls, S.D.
88. MSB 5 Minesweeper, Ft. Worth, Texas
89. USS *Cavallo*, USS *Stewart*, Galveston, Texas
90. Hampton Roads Naval Museum, Norfolk
91. Portsmouth Naval Shipyard Museum, Portsmouth, Va.
92. Bremerton Naval Museum, Bremerton, Wash.
93. Naval Undersea Museum, Keyport, Wash.
94. USS *Cobia/Manitowoc* Maritime Museum, Manitowoc, Wis.



CyberSailor

Cyber-Medicine for the masses

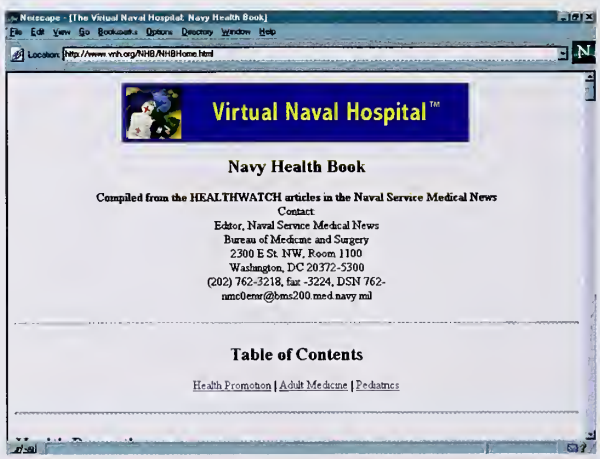


Because this month's *All Hands* is focusing on the Navy's medical community and highlighting the 100th anniversary of Hospital Corpsmen, I started thinking about how the Internet might be able to help out when it comes to the various ailments and maladies Sailors experience.

By searching Navy medical sites, I came upon one that is worth a look. It's a site that sure seems to do it all — the Virtual Naval Hospital (VNH).

Located at http://www.vnh.org, this destination is posted by the University of Iowa College of Medicine with help from the Bureau of Medicine and Surgery (BUMED). Before heading there, be forewarned — it can be a bit of a chore to get in.

The homepage offers an avenue for providers (that's modern-speak for doctors, HMOs, etc.) and one for patients. Being accustomed to the role of patient, that's where I headed.



So what are you interested in? The VNH offers information on everything from back injuries and family planning to smoking cessation and first aid. Each category contains links to a variety of resources on the subject.

Let's take First Aid for example. While I wasn't too concerned at this point in getting the lowdown on sucking, chest wounds (sorry, I just had to say that), I did want to find out some basic first aid stuff. So, on I went to a page entitled "First Aid for Soldiers - 1." Yes, that's right... first aid for soldiers. It seems that the VNH has put a number of medical information manuals online for our use.

In case you're wondering, the online manuals are pretty extensive and include the Navy health book and Army field manuals on first aid. Links are available to other medical books, like the American Heart Association's *Heart & Stroke A-Z Guide* and the Columbia University College of Physicians and Surgeons' *Complete Home Medical Guide*.

Okay, back to first aid.

I expected page after page of endless words; what I got was a huge surprise. Granted, there were no animations, MIDI files or flashing banners. In fact, the site is rather plain. But what I found was a well laid-out page and easy to read tables with steps to take in an emergency. Further on, I discovered drawings showing how to take an injured person's pulse (neck, wrist or ankle). Other pages held information on CPR (cardiopulmonary resuscitation),

choking, bleeding, shock and more.

It's not the subject matter I normally surf for and definitely not stuff I think about often. In fact, I wouldn't advise keeping the URL in your hip pocket in case something goes wrong. What I would recommend, especially for families, is to check VNH's various pages out and print out a few. It's an easier (and cheaper) way to keep an up-to-date medical first aid and information book around your home.

Relieve that STRESS!

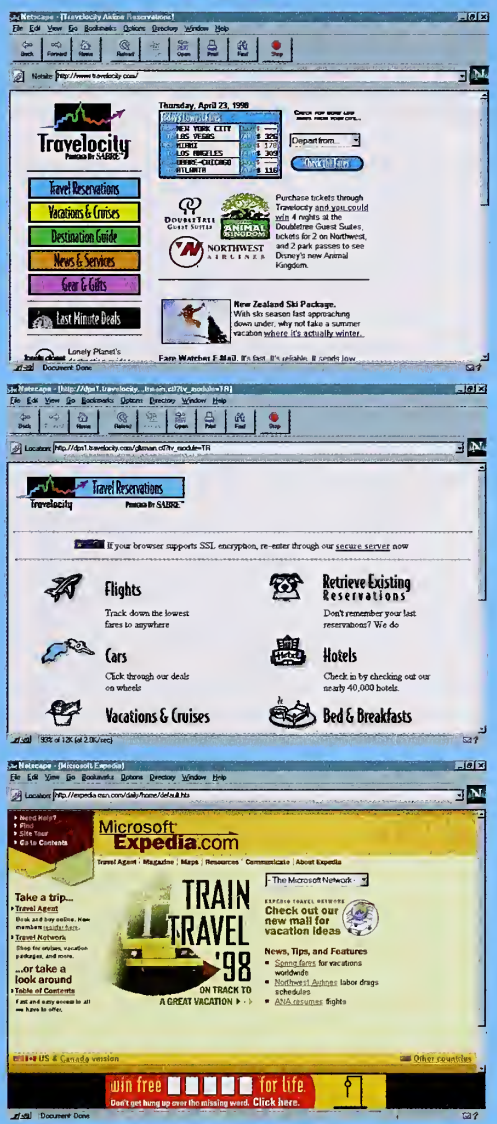
Medical reports say stress can wreak havoc on our mental and physical health. Anything we can do to reduce that stress helps. Take a look outside. The weather's warmer, El Niño is subsiding and school's out. It's travel time and that's a great way to rid ourselves of all that winter tension!

Looking for a place to go? First, head to http://www.travelchannel.com, the web presence of TV's Travel Channel, or Microsoft's Expedia at http://www.expedia.msn.com. You can find destinations from the exotic (how 'bout a quick week in Nepal) to the more common (a weekend on the beach in San Diego).

The web is packed with folks giving away travel information or willing to set you up with your dream vacation. American Express, one of the better known travel companies, is located at http://www.americanexpress.com. This site lists some great places to go, ways to get there and reservations on places to stay. Not enough? Want more? Cruise over to Travelocity at http://www.travelocity.com. There you can subscribe to an e-mail service which keeps you advised on the lowest airfares available for your chosen destination.

And speaking of airfares, the web gives you the chance to book your own flights. Most major airlines maintain sites on the web. Other companies are springing up which offer alternative methods of booking tickets. Priceline.com (http://www.priceline.com/PriceLineHomePage/cfml/main.cfm) even allows potential travelers to "bid" on ticket prices, something worth checking out if you're on a tight budget (and who isn't?).

No matter whether you're traveling across country or to a getaway in the South Seas, the Internet is the best way to get the right information... right now.



Eye on the Fleet

PH3 HEATHER HUMPHREYS

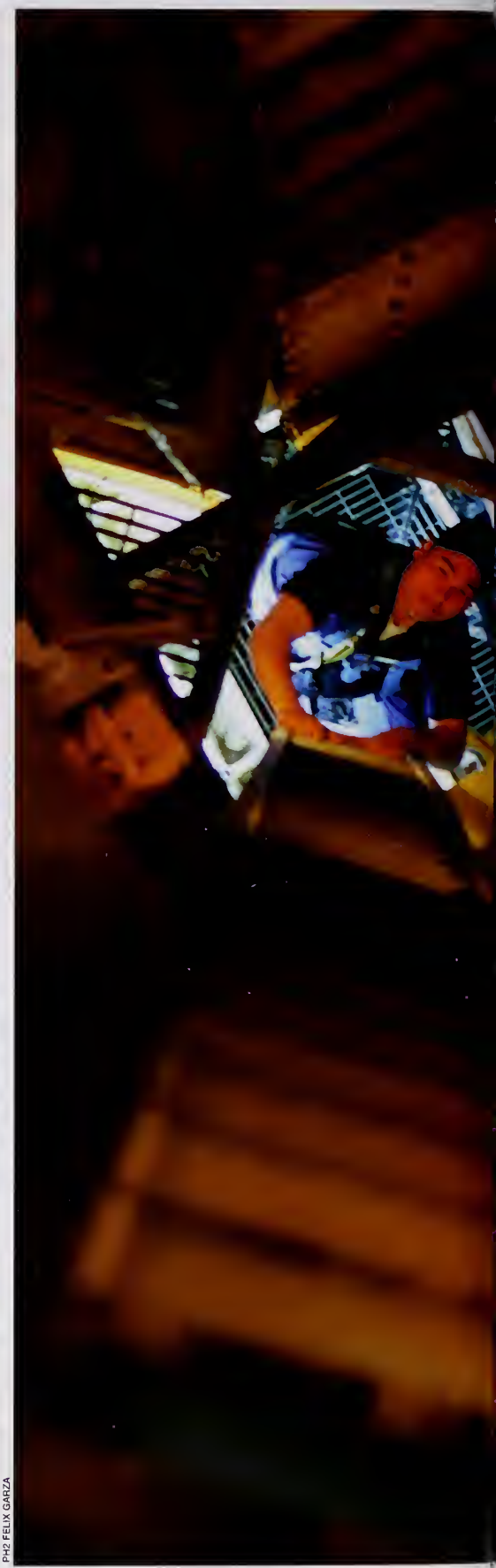


(Above, from left) AA Sanders from Tulsa, Okla.; AN Gosselin from Vancouver, Wash.; and AO1 Deluca from Buffalo, N.Y., assemble an GBU-16 laser guided bomb in one of the magazine spaces aboard USS *Nimitz* (CVN 68).

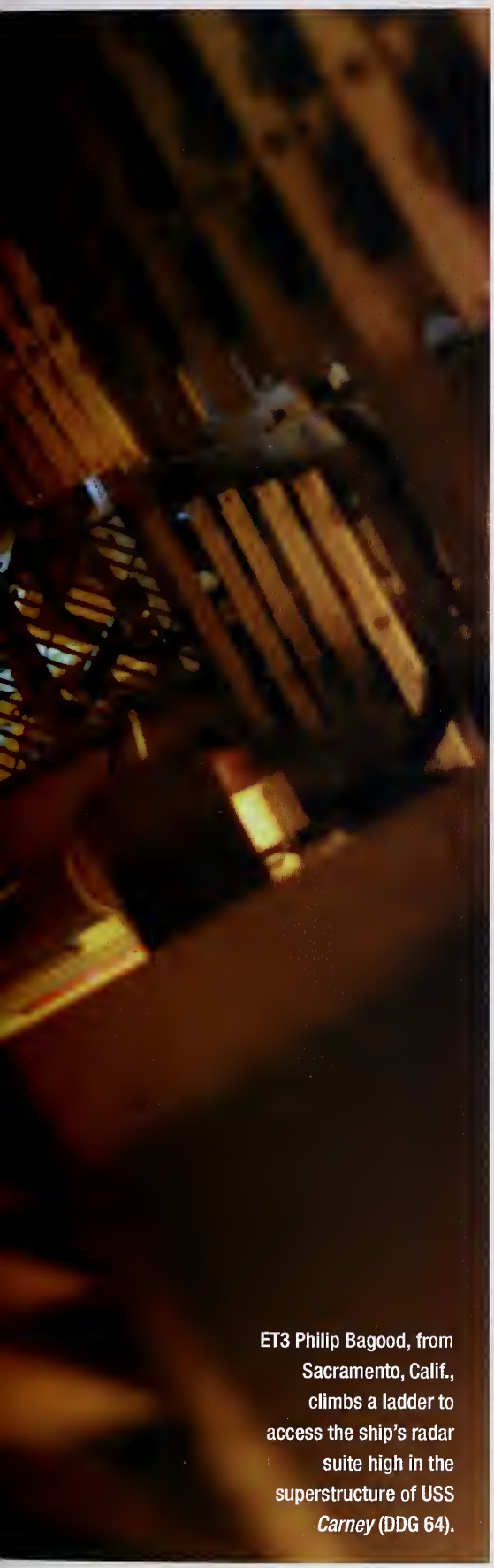


PH1 MARTIN E. MADDOCK

(Above) SM Scott K. Gliebe, from Harmony, Pa, uses semaphore aboard the amphibious assault ship USS *Guam* (LPH 9) to signal another ship.



PH2 FELIX GARZA



ET3 Philip Bagood, from Sacramento, Calif., climbs a ladder to access the ship's radar suite high in the superstructure of USS *Carney* (DDG 64).

PH3 NORMAN HAMPTON



(Left) Crewmembers of USS *George Washington* (CVN 73) participate in a "push and pull" weightlifting competition at the halfway point of their Persian Gulf deployment.

(Below) SM3 Calvin Adams, from Danville, Ill., flashes Morse code from the signal bridge of USS *George Washington* to signalmen aboard USS *Nimitz* (CVN 68) as the two ships come alongside each other in the Persian Gulf.



PH3 SAMMY DALLAL

Eye on the Fleet is a monthly photo feature sponsored by the Chief of Information, Navy News Photo Division. We are looking for high-impact, quality photography from Sailors in the fleet to showcase the American Sailor in action. To be considered, forward your images with full credit and cut-line information, including full name, rank and duty station. Name all identifiable persons in the photo and include any important information about what is happening in the photo, where the photo was taken and the date. Commands with digital photo capability can send attached .jpeg files to *navynewsphoto@hq.navy.mil*.

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Eye on the Fleet

(Right) ABE3 Joshua Schwandt, from Sacramento, Calif., signals a clear launch of an F-14 Tomcat from USS *Independence* (CVN 62).





PH3 SAMMY DALLAL

(Above, from left) RM1 Anthony Owens, from Brooklyn, N.Y., LT Brenda Bradley, from Richmond, Va., and DP2 Jerome Howard,from Atlanta, Ga., sing songs of praise during the National Prayer Breakfast aboard the aircraft carrier USS *George Washington* (CVN 73).

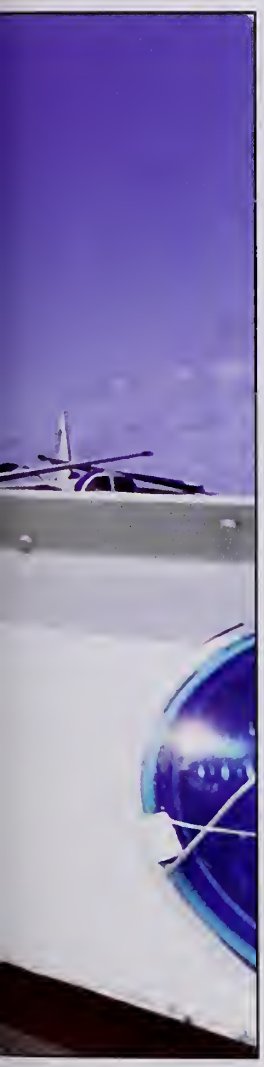
IC3 Dean Gibson aligns the Manually Operated Visual Landing System (MOVLAS), a back-up landing system aboard the aircraft carrier USS *Nimitz* (CVN 68).



PH3 CHRISTOPHER MOBLEY

PHAN BRIAN HOOSACK





PH3 MICHAEL L. GREENE



PN3 Patricia A. Ortiz, from Chicago, Ill., aids a crew member in updating her service record in the personnel office aboard the nuclear powered aircraft carrier USS *Nimitz* (CVN 68).

PH2 FELIX GARZA



ET1 Mark Caprio, from Jacksonville, Fla., checks radar equipment high above the guided-missile destroyer USS *Carney* (DDG 64).

Around the Fleet

Amphib training conducted off East Coast

NORFOLK — Amphibious Squadron (PHIBRON) 8 and the 22nd Marine Expeditionary Unit (MEU) recently completed the first phase of integrated training off the coast of North Carolina.

The Amphibious Ready Group (ARG), consisting of command ship USS *Saipan* (LHA 2), USS *Austin* (LPD 4) and USS *Tortuga* (LSD 46), worked closely with the 22nd MEU in conducting several amphibious exercises. Included in the training were several days of deck landing qualifications for Marine Helicopter Squadron (HMM) 162 and Navy Helicopter Combat Support Squadron (HC) 6. Amphibious boat training was conducted by Assault Craft Units 2 and 4.

"We developed an ambitious schedule of events for the week and met or exceeded every training objective," said CAPT Dick Enderly, Commander, PHIBRON 8. "The ships and their crews, the naval support elements and the Marines all showed superb initiative and enthusiasm, which indeed resulted in a solid beginning for this team." *(JOC Paul Brown, USS* Saipan *(LHA 2) Public Affairs)*

Education gives Sailors competitive edge

WASHINGTON — Studies show that Sailors can enhance their professional development and stay competitive for advancement by participating in voluntary education (VOLED) programs offered through the Navy. Programs such as Tuition Assistance (TA), Program Afloat for College Education (PACE) and Academic Skills Learning Centers provide Sailors the



Guam SAR team medevacs C

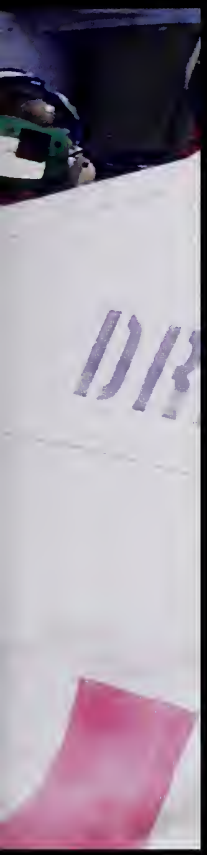
ABOARD USS *GUAM* IN THE ATLANTIC — As the amphibious assault ship USS *Guam* (LPH 9) steamed across the Atlantic Ocean en route to its home port in Norfolk, it received a distress call from the bridge of a Croatian bulk carrier. The ship's master was requesting medical assistance for two mariners on board. One was suffering from severe abdominal pain and the other was experiencing an irregular heartbeat.

At the time of the call, the merchant vessel was about 350 miles from *Guam*. Staff members from Amphibious Squadron (PHIBRON) 2 immediately drew up plans to medevac the two sailors. The decision was made to steam toward the merchant ship and, once within range, launch a search-and-rescue (SAR) team from Helicopter Squadron 6 (Det. 3) the next morning.

At first light the helicopter crew was in the air and within minutes arrived on scene. Meanwhile, the ailing sailors were moved topside and prepared for the airlift.

The helo faced a few minor complications with the Croatian ship. For example, the Croatian ship had several 30-to-40-foot cranes on the weather deck which forced the rescue helicopter to hover about 75 feet above the deck. Most rescue hoistings are made at approximately 10 feet.

Aviation Electronic Technician 3rd Class Kurt Violette of Waterbury, Conn., who was lowered to the deck to prepare the evacuees for the lift, said operating in five-to-seven-foot seas was a



Sailors and Marines on the flight deck of USS *Guam* (LPH 9) rush an ailing Croatian merchant marine to the ship's medical ward below deck.

...ion mariners

challenge.

Despite the obstacles, the mariners were safely transported back to *Guam* and promptly treated in the ship's medical ward.

CAPT William J. Luti, *Guam*'s commanding officer, called the rescue mission's success an example of how unselfish Sailors and Marines are. "Some sailors needed help and these young men and women quickly responded," said Luti. "They continue to impress me every day."

For more information on USS *Guam*, visit their website at **http://www.spear.navy.mil/ships/lph9/guam.htm.**

(Story by JOC Doug Hummel, photo by PHAN Rich Williams, USS Guam *Public Affairs)*

opportunity to move ahead academically.

A recent study conducted by the Center for Naval Analysis documented a significant and positive relationship between voluntary education and promotion and retention. Sailors who improve their academic skills triple their chance to cross-rate to undermanned ratings. Sailors who complete 15 to 30 college credits have a 20 percent greater chance of making E-5 in their first five years of service than those who don't. Those with 60 college credits have a 35 percent greater probability.

Tuition Assistance is the principal means for Sailors attached to shore activities to pursue further education. In FY97, more than 41,000 Sailors enrolled in nearly 119,000 courses during off-duty hours. TA pays up to 75 percent of both undergraduate and graduate courses, up to a monetary cap of $2,500 for undergraduate courses and $3,500 for graduate courses per fiscal year. In FY99, the monetary cap will increase to $3,500 for

Abraham Lincoln Sailors Heroes

BRITISH COLUMBIA, Canada — Two Sailors serving aboard the aircraft carrier USS *Abraham Lincoln* (CVN 72) recently helped save a man's life while on liberty in Victoria, British Columbia.

While eating in a local coffee house, Seaman Recruit Rodney Jennings and Fireman Recruit Ivan Butler found a man collapsed on the restroom floor.

"I turned him over and saw that he wasn't breathing," recalled Butler, "so I put him on his side, crossed his arm over his chest and he started breathing again. Then I laid him on his back and put a backpack under his head to keep his air passages open."

While Butler attended to the man, Jennings asked the coffee shop attendant to call an ambulance. Both Sailors stayed with the man until paramedics arrived 15 minutes later.

According to a Victoria police officer who arrived at the scene, the man would have likely died had it not been for the Sailors' timely intervention.

"Anybody would have done it," said Jennings. "We just happened to be in the right place at the right time."

The two Sailors also had just happened to have received emergency first aid and CPR training during their ship indoctrination. They said the mandatory training was priceless because it helped them save a life.

For more information on USS *Abraham Lincoln*, visit their website at **http://trout.nosc.mil/~cvn72box/index.htm.**

(*USS* Abraham Lincoln *Public Affairs*).



Photo by PH3 Daniel J. Wolsey

While on liberty in Victoria, British Columbia, FR Ivan Butler (left) of Hayward, Calif., and SR Rodney Jennings of Bellefountaine, Miss., used the CPR training they had received aboard USS *Abraham Lincoln (CVN 72)* to save a Canadian man's life.

Around the Fleet

both, with a $187.50 per credit cap.

Sailors assigned to ships can enroll in the PACE program, in which Sailors pay the cost of textbooks while the Navy fully funds the courses. In FY97, Sailors took almost 33,000 courses at sea. PACE is available to every ship in the Navy. Courses can be taught by resident instructors or by computer interactive video.

Participation at Academic Skills Learning Centers helps Sailors upgrade their basic academic skills, increase ASVAB scores, better prepare for college degree programs and gain a professional advantage in performing their Navy jobs.

For more information on education opportunities in the Navy, visit the Navy VOLED website at http://voled.doded.mil/active/Navy.
(BUPERS Public Affairs)

Dental Techs reach 50th birthday

WASHINGTON — Navy dental technicians celebrated their golden anniversary April 2. The creation of a separate dental rating was authorized by 1948.



Before 1948, dental assistants were hospital corpsmen trained as assistants or prosthetic technicians. Their number grew to more than 10,000 in World War II. Dental technicians served admirably during wars in Korea, Vietnam, Lebanon and the Arabian Gulf. One technician, Dentalman Thomas Christensen, earned a posthumous award of theNavy Cross for gallantry in Korea.

Currently, there are 3,021 active and 679 Reserve dental technicians. They serve in nine Navy enlisted codes -- basic technician, dental laboratory technician, surgical technician, Fleet Marine Force technician, equipment repair, administrative technician, dental hygienist and maxillofacial technician. *(HMCS Mark Hacala, Bureau of Medicine and Surgery)*



EA2 John Meyer of Kettering, Ohio, pressure washes the outside of the Ramona Boys and Girls Club during United Way Northeast Florida's "Day of Caring". Meyer and 17 other REDCOM 8 Sailors joined other project volunteers in the Jacksonville, Fla., community.

REDCOM 8 supports Day of Caring

JACKSONVILLE, Fla. — Seventeen Sailors from the Naval Reserve Readiness Command (REDCOM) 8 joined local United Way agencies and area volunteers for the 1998 Day of Caring. The joint effort, intended to help finish area, is in its seventh year in the Jacksonville, Fla., community.

REDCOM 8 volunteers contributed by renovating a local youth club. They constructed several flower beds, pressure-washed the exterior of the club, raked leaves, picked up trash and painted several rooms.

Seaman Darnien Crawly said he was amazed at the huge difference REDCOM 8 volunteers made in the club's appearance in just a day's work.

"We knew when we got to the club that we had our work cut out for us," said the 20-year-old yeoman from Notasulga, Ala. "I was really surprised to see how hard work paid off in such a short time."

REDCOM 8 Sailors are involved in many other Jacksonvlle volunteer projects, such as "Paint the Town Red" and "Habitat for Humanity."

For more info on REDCOM 8, visit their website at http://www.navy.mil/homepages/redcom8.

(Story and photo by JOl Crystal M. Raner, REDCOM 8 Public Affairs)

Navywide home address collection required

WASHINGTON — All military personnel are now required to provide a current address for the DOD Centralized Personnel Locator Service.

To maintain accurate, up-to-date addresses for all Navy personnel, current addresses will be stored in the Defense Enrollment Eligibility Reporting System (DEERS).

If you are within 30 days of changing your permanent duty station or home address, you must update your current address as follows:

If you're on shore duty in CONUS, you must provide your residential address;

If you're assigned OCONUS, aboard a ship, with a routinely deployable unit or are work with national security or higher authority tasking, you must provide your duty or command address;

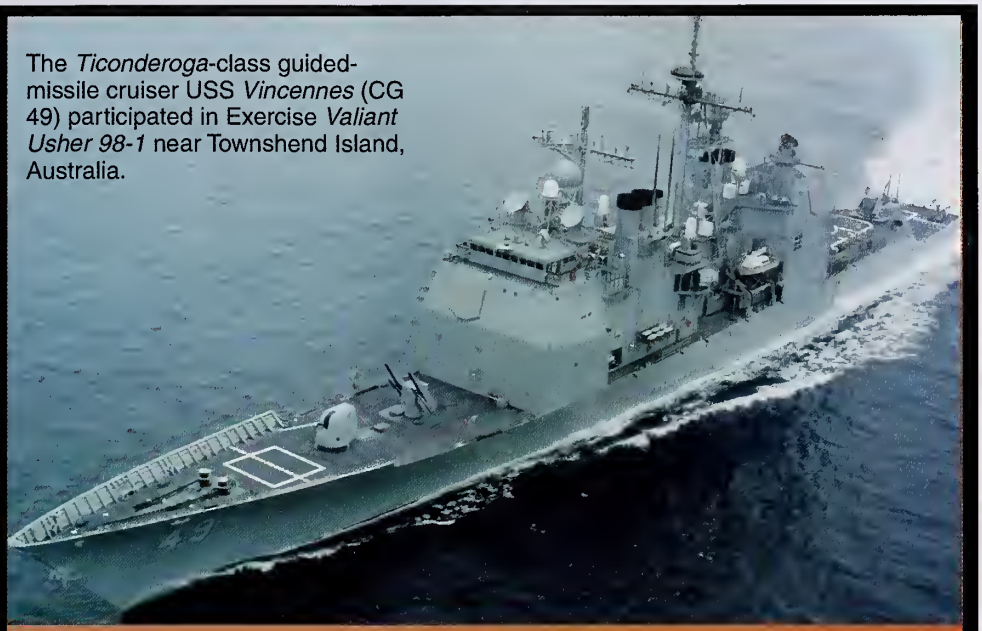
If you're stationed OCONUS with a deployable unit, you must provide your command duty address in addition to ensuring your family members provide a current residential address.

Updating your address is simple. Either contact your local personnel support detachment, send an e-mail directly to DEERS at <addrinfo@osd.pentagon.mil>, or call the DEERS Support Office at 1-800-527-5602 (Hawaii and Alaska), 1-800-334-4162 (California) or 1-800-538-9552 (all others CONUS).

For more details on the new requirement to maintain a current address with DEERS, refer to NAVADMIN 313/97, or email Doris Perry at p334a@bupers.navy.mil.

For information on other personnel-related issues, visit the BUPERS website at www.bupers.navy.mil.

(Story by LT Bill Anderson, BUPERS Public Affairs)



The *Ticonderoga*-class guided-missile cruiser USS *Vincennes* (CG 49) participated in Exercise *Valiant Usher 98-1* near Townshend Island, Australia.

Vincennes participates in *Valiant Usher 98-1*

TOWNSHEND ISLAND, Australia — The guided-missile cruiser USS *Vincennes* (CG 49), forward deployed to Yokosuka, Japan, recently completed Exercise *Valiant Usher 98-1* with USS *Belleau Wood* (LHA 3)amphibious ready group and the Royal Australian Navy destroyer HMAS *Perth* (DDG 38). The combined exercise took place near Townshend Island, Australia.

As part of the exercise, the 31st Marine Expeditionary Unit, embarked on USS *Belleau Wood*, USS *Dubuque* (LPD 8) and USS *Germantown* (LSD 42), assaulted the beach at Townshend Island.

Training also included close air support, fire support from *Vincennes* and *Perth*, and small arms fire from troops ashore.

Vincennes provided naval surface fire support to the 3,000 Marines conducting maneuvers on Townshend Island. Using her two 5-inch guns, the guided-missile cruiser fired 350 rounds of ammunition.

After the exercise was completed, *Vincennes* crew members visited a series of Australian port.

For more information on Exercise *Valiant Usher 98-1*, visit the U.S. 7th Fleet website at **http://www.c7f.navy.mil.**

(USS Vincennes *Public Affairs)*

Seabees in Bosnia transfer bridge to locals

BRCKO, near Bosnia — A 17-Seabee detail from Naval Mobile Construction Battalion (NMCB) 1 recently spent three days dismantling and removing military fighting positions on both sides of the Brcko bridge, in the town of Brcko near Bosnia.

"The idea was to turn the responsibility of bridge control back to the local government," said Chief Construction Mechanic (SCW) James Radford.

"The Seabees who have been assigned to Bosnia during the past two years have proven that teamwork is the way ahead," said LCDR Pete Lynch, contingency engineer for the U.S. European Command in Stuttgart, Germany. "Their seamless transition into the Bosnia operation sets the example for future joint engineering missions."

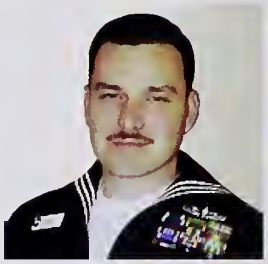
For more information on Navy Seabees, visit their website at httpwww.chinfo.navy.mil/navpalib/factfile/personnel/ seabees/seabee1.html.

(Story by JO2 Kelly A. Trout, NMCB-1 Public Affairs)

Shipmates



CDR Byron Joseph, USNR, a San Diego policeman, received the San Diego Police Department's highest award for bravery after being wounded while apprehending a suspect in a shooting. He received a Purple Heart and a Medal for Valor for his acts of courage and dedication to duty. He is an aviator with HSL-84 at NAS North Island, San Diego.



Hospital Corpsman 1st Class (SW/AW/FMF) Thomas E. Rice was selected as the 1997 Senior Shore Sailor of the Year for Naval Hospital, Charleston, S.C. A native of West Palm Beach, Fla., Rice directed daily operations, maintained administrative requirements and updated the command's $22 million property inventory, and attainied a 97.8 percent accountability.



Disbursing Clerk 1st Class (SW) Kimberly J. Werla is the Space and Naval Warfare Systems Command 1997 Sailor of the Year. As the SPAWAR Detachment San Diego travel and assistant budget officer, she reduced travel claim processing time by 90 percent and government credit card error by 70 percent. The Delaware native is on the Fleet Reserve Association Branch 61 Board.

LT Glen S. Leverette of the Surface Warfare Officers School Command (SWOSCOLCOM) was recently selected as the 1997 Junior Officer of the Year for the Newport naval complex. Leverette, a native of Daytona Beach, Fla., was cited for his sustained superior performance as an instructor, his professionalism and commitment to quality education and his active community involvement.





Dental Technician 3rd Class Angela Watson was selected as the 1997 Junior Sailor of the Year for Naval Hospital Charleston, S.C. A native of Sanford, N.C., Watson took on the additional responsibilities of directing daily operations, increasing dental readiness to more than 95 percent and maintaining all administrative requirements, while she performed her daily duties.

Boatswain's Mate 1st Class (EOD) Michael C. Doyle was selected as the Commander, Explosive Ordnance Disposal (EOD) Group 1, 1997 Staff Sailor of the Year. The Oregon native is the technical reference library custodian, security assistant custodian and NWP custodian. He directs and manages more than 500 vehicles, 100 boats and $50 million in EOD equipment.



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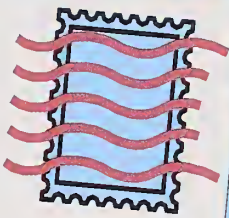
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Postcard from the Fleet



Name: DN Kimberly Little

Command: Fleet Surveillance Support Command, Chesapeake, Va.

Hometown: Philadelphia

Hobbies: Dancing, movies, roller skating and traveling

Favorite Duty Station: Fleet Surveillance Support Command

Favorite Quote: Philippians 4:13

Key to Success: "You have to work hard and have discipline, determination and motivation."

Goals: "My main goal is to be successful at anything I do! I would really like to pursue a career as a hygienist or in dentistry."







Hospital Corpsmen

100 Years in Action

NAVY DEPOT COPY

ALL HANDS

Magazine of the U.S. Navy

July 1998



Surface Warfare

Arabian Gulf intercept ops

Life in the belly of an amphib

USS *McFaul:* a state-of-the-art ship manned by high-tech sailors

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July
Number 975


Photo by PH2 Felix Garza

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On the morning of June 3, 1898, a U.S. Navy lieutenant and his crew of seven drove a broken-down, unarmed collier into a heavily defended Cuban harbor – and tried to sink her.

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On the Cover

OS2 (SW) Christopher Pierce, USS *Crommelin's* (FFG 37) VBSS Team Leader, climbs down a jacob's ladder as his team prepares to board a suspected smuggling vessel in the Arabian Gulf.
Photo by PH2 Jason Carter



On the Back Cover

QMSN Brian Phillips of Chillicothe, Ohio, shoots a fix on a land mark while USS *Typhoon* (PC 5) pulls into Rota, Spain.
Photo by PH1 Jim Hampshire

Break Away!



Motto: Strength for Freedom
Breakaway Song: Bustin' Loose
Homeport: Mayport



Motto: Determined Warrior
Breakaway Song: Bad to the Bone
Homeport: Norfolk



Motto: Strength in Freedom
Breakaway Song: Wipeout
Homeport: Pearl Harbor



Motto: Proptus Et Paratus (Prompt and Prepared)
Breakaway Song: Theme from *The Magnificent Seven*
Homeport: San Diego



Motto: First and Fomidable
Breakaway Song: Don't Worry, Be Happy
Homeport: Pascagoula



Motto: Fuel for Freedom
Breakaway Song: Respect
Homeport: Pearl Harbor



Motto: Leading the Charge - Everyone Else is Behind the Eight Ball
Breakaway Song: Back in Black
Homeport: San Diego



Motto: Steadfast and Courageous
Breakaway Song: I Feel Good
Homeport: San Diego

Around the Fleet

8 Seconds

The work day is over and it is time to relax and unwind. No more inspections. No uniforms. No leading petty officers in your face. No mandatory deadlines. No field days. No duty. No orders. Just a little peace and quiet. Right? For some, maybe. But not for Aviation Maintenance Administrationman Airman (AZ) Rex Mancuso. He's on his way to his second job — as professional bull rider.

Originally from Amarillo, Texas, Rex is a member of the Professional Bull Riders Association (PBR) and the Professional Rodeo Cowboys Association (PRCA). "Riding bulls is like nothing you will ever try. It's pure adrenaline and a touch of fear," Mancuso said. Assigned to Helicopter Anti-Submarine Squadron Light 84, he has been in the Navy since December 1996.



Photo courtesy of the Mancuso family

Ride 'em Cowboy! Rex Mancuso competes in the "Super Bull" in Amarillo, Texas.

When asked to comment on the art of bull riding, Mancuso was adamant, "That eight-second ride is only a small part of the bigger picture. There are miles of driving and hours of training. When that bull is bucking and spinning 2,000 pounds of loose hide, all you have to keep you up is your grip and a loose rope. Bull riding is ninety-eight percent mental. It comes down to who wants it more."

Mancuso went to college on a rodeo scholarship and has won numerous competitions. It is a safe bet that he will always be somewhere in the top 15. Upon completion of his current tour, Mancuso plans to get out of the Navy and compete on the professional rodeo circuit. That means more long drives and three to four rodeos a week. But Mancuso said it will all be worth it when he makes it to the PRCA World Finals in Las Vegas, Nevada. "I plan to win the world bull riding finals."

Mancuso's advice to others: "Don't be afraid to chase your dreams or be whatever it is you want to be, but don't be afraid to pay the price."

Story by YN1 Tom Hussey, Helicopter Anti-Submarine Squadron Light 84

Anthrax vaccination program progressing

More than 10,000 Sailors have been inoculated since Secretary of Defense William S. Cohen's announcement that all military personnel deployed to the Arabian Gulf will get anthrax vaccinations.

Biological weapons are maintained by several countries around the world. Use of these weapons could cause widespread illness among unprotected military forces. Anthrax is one of the most-deadly biological agents in use today. It is highly lethal and easy to produce in large quantities and as a weapon. It can also be spread over a large area quickly. There are no known cases of un-innoculated persons surviving an exposure to the anthrax spore. Symptoms, which appear within hours of exposure, include fever, cough, respiratory problems and severe shock.

By being fully vaccinated the chances of survival are greatly increased.

The immunization program consists of a series of 6 inoculations over an 18-month period, followed by an annual booster. Although the level of protection increases with each shot in the series, the full complement of 6 shots is required for full protection.

More information on the anthrax vaccine can be found on the web at **http://www.defenselink.mil/other_info/protection.html#Anthrax**

Story by JO2 Jeremy Allen, All Hands.

LDO/CWO applications due Aug. 1

Eligible first class, chief and senior chief petty officers are encouraged to apply for FY00 Limited Duty Officer (LDO) and/or Chief Warrant Officer (CWO) programs. Applications are due to BUPERS by Aug. 1.

Master chief petty officers can only apply for the CWO program. If selected, master chiefs with two years in grade as of Oct. 1 of the year in which the board convenes will be appointed to CWO3. CWOs who have completed at least one year in grade as of Oct. 1 are also encouraged to apply for LDO; if selected, they will be appointed to lieutenant junior grade.

LDO/CWO programs provide the Navy with high-level technical managers and specialists to assume leadership in key positions. Through these programs, outstanding senior enlisted personnel may compete for a commission without a college degree. LDOs and CWOs comprise approximately 10 percent of the Navy's officer corps.

Applicants should review BUPERS INST 1131.1A for information on eligibility and

SeaBees "Can-Do" spirit docks in the Desert

Speed Boats. Jet skis. Fishing. All are images that come to mind when one pictures the small lakeshore community of Lake Havasu City, Ariz. But dump trucks, graders and heavy machinery are the reality.

Site 6 on the Lake Havasu waterfront is currently under construction. Soon, with the help of the 3rd Naval Construction Brigade of Port Hueneme, Calif., Site 6 will serve as a boat launch facility and a family fishing spot for local residents and seasonal vacationers.

The idea for the project began six years ago as a public-private venture of Anglers United, the Bureau of Land Management and Lake Havasu City. However, financial setbacks delayed the plan's kickoff. Kirk Koch, Bureau of Land Management project manager, suggested the Seabees as a possible option and contact with the 3rd Naval Construction Brigade was made in an effort to move the project forward.

Three weeks after the city council let the contract, the Seabees were on site and the project was on schedule and under budget.



Photo by EO2 Kevin Cullen

SW2 Mark Johnson lays electrical conduit in Lake Havasu, Ariz.

According to LT Jerry Grence, project manager for the 3rd Naval Construction Brigade, the Seabees knew they could get the job done and done right. "I knew we had the talent and the knowledge to successfully complete the planned design. The Seabee mission fit perfectly with the project's requirements." The use of military labor is part of the Innovative Readiness Program initiated by President Clinton.

Said Koch, "Everybody wins on this project. The project is ahead of schedule due to the volunteerism of the military and the community."

When the pier is finished, the T-shaped dock will extend 174 feet into the cove at Site 6, with a 132-foot section at the head of the "T" housing nine covered fishing houses. The dock will also be wheelchair-accessible, a feature which makes this pier unique.

Because of the efforts of the Seabees, taxpayers are being saved $250,000 in construction costs and the once rocky beachfront is being transformed into a sandy marina. Completion is set for late spring, when the Navy will pack up and set sail from the desert.

Story by LT Priscilla L. Baird, public affairs office, 3rd Naval Construction Brigade

Around the Fleet

application procedures. All applicants are encouraged to order and review their microfiche and personal summary records at the earliest opportunity. Records can be requested from Pers-313 by mail or fax at DSN 224-8882 or (703) 614-8882. The BUPERS Homepage **(www.navy.mil/homepages/bupers)** has information on requesting microfiche and personal summary records, as well as on the LDO/CWO program.

NAVADMIN 066/98 contains a list of common errors and omissions from applications and details on applying. Questions concerning applications, including verification of receipt, should be directed to PERS 811 at DSN 224-2531/1193 or (703) 614-2531/1193 or e-mail: **p811@bupers.navy.mil.**

Applications should be mailed to Commander, Navy Personnel Command (PERS 811D), Bldg. 791, NSA Memphis, 7800 Third Ave., Millington, TN 38054-5059.

Story by BUPERS Public Affairs

SSN 23 USS *Jimmy Carter*

The Secretary of the Navy officially named the newest *Seawolf*-class nuclear-powered submarine *Jimmy Carter* (SSN 23) April 27, in honor of the 39th president of the United States.



Carter has distinguished himself through a lifetime of public service and is the only U.S. president to ever be submarine qualified.

"President Carter is a living example of our Core Values of honor, courage and commitment," said Chief of Naval Operations ADM Jay L. Johnson.

Seawolf-class submarines are the most capable, multi-mission submarines ever built.

"When *Jimmy Carter* joins the fleet in December 2001, she will be the fastest, quietest and most heavily-armed, technologically-advanced submarine ever built," said Johnson. "At 393-feet and displacing 9,000 tons, she represents the finest that American industry can put forward. She is also crewed by the finest Sailors the world has ever seen. The *Seawolf*-class submarine is an awesome machine."

Story by JO2 Brigette Barnes, Navy News Service

Postcard From the Fleet



Name: GSMFN (SW) David Alec Jones
Assigned to: USS *Stout* (DDG 55)
Hometown: Stillwater, Okla.
Hobbies: NASCAR and country music
Best Part of the Job: "Getting opportunities to excel—like becoming the first non-petty officer onboard *Stout* to get ESWS qualified.



SECDEF awards Environmental Security

The winners of the Defense Environmental Security Awards were recently recognized by Secretary of Defense William S. Cohen for their accomplishments in the areas of natural resources conservation, cultural resources management, environmental quality, pollution prevention, recycling and environmental cleanup.

Navy award recipients are listed below by category:

Natural Resources Conservation:
Naval Submarine Base Kings Bay, Ga.

Environmental Quality, Industrial Installation:
Naval Aviation Depot North Island (NADEP), San Diego.

Pollution Prevention, Weapon System Acquisition Team:
New Attack Submarine Environmental Management Team, Arlington, Va.

Recycling, Non-Industrial Installation:
Naval Station San Diego.

Story by DOD Public Affairs

School's in Session

How do you take a ship to school? You don't. You bring the school to the ship.

Enter the Afloat Training Group, or ATG. According to Operations Specialist 1st Class (SW) Patrick T. Therrien, one of ATG's aviation warfare systems experts, ATG's mission is to fuse a ship's crew into a cohesive fighting unit through evaluation and instruction.

"When we come aboard, we bring people — anywhere from 15 to 40 trainers — in various rates to evaluate areas such as aviation warfare, electronic warfare, navigation, communications, etc. There's not a department on the ship we're not involved in."

The evaluation process can be long and, at times, tedious.

Included in that process is a week-long, scenario-based exercise called a Command Assessment of Readiness and Training, or CART, which uses pierside simulators to generate battle scenarios.

The entire visit may last as long as four weeks. But the team will not leave until they are confident the ship is ready to enter combat situations as a cohesive fighting unit.

"I try to show Sailors the right way to do things, and stop any bad habits they might have," said Therrien.

One of the team's most important goals is to show the different divisions the importance of interaction and coordination.

"When you're conducting an engineering fire drill, you have to remember that it doesn't affect just that area. There may be several divisions affected by that kind of damage. So when we play out a scenario, we involve everybody, so they can learn to coordinate their efforts," he said.

Using a fairly new method of standardized teaching, called "objective-based training," ATG has also eliminated a major source of confusion during exercise scenarios—interpretation. By using a standardized checklist for every procedure a scenario might impose on a ship, Sailors now have a black and white answer to any question that may arise during a combat evolution.



Photo by JO1 Rodney J. Furry

ATG Trainer, OS1 (SW) Patrick T. Therrien offers guidance to Jeffery K. Foster during an anti-air warfare exercise aboard USS *Milius* (DDG 69).

"We're a lot more hands-on now when it comes to training scenarios. We build our own scenarios, then plan how we will approach the problem. ATG has helped us to figure out if we are doing it properly," said OS1 Jeffery K. Foster, a watch center supervisor aboard USS *Milius* (DDG 69).

With increasing combat technology and expanding capabilities, Sailors need to be efficient, proficient and able to operate as a team in order to maintain their combat edge — ATG is there to make sure that happens. "I'm going back to the fleet someday, and when I get there, I know the Sailors working for me will be as sharp as they can be," said Therrien.

Story by JO1 Rodney J. Furry, a San Diego-based photojournalist assigned to All Hands



Tactical information Coordinator, OS2 Mike Langdale, of Westminster, Calif., monitors a radar screen in the Combat Information Center aboard the guided-missile destroyer USS *John S. McCain* (DDG 56).

Photo By PH2 Felix Garza



USS *Crommelin's* Visit, Board, Search and Seizure (VBSS) Team heads for a suspected smuggling vessel.

Photo By PH2 Jason Carter



The guided-missile destroyer USS *Carney* (DDG 64) patrols the waters of the Persian Gulf in support of Operation *Southern Watch.*

Sentinels

[OF INTERNATIONAL WILL]



Photo By PH2 Felix Garza

In the still waters of the North Arabian Gulf, a group of American Sailors leaves the relative security of their warship to board a small boat which will take them to their goal. Several hundred yards away, an aging cargo ship sits idle — her master paces the deck awaiting the arrival of the boarding party.



Photo By PH2 Jason Carter

Since 1990, scenes such as this have played out nearly 11,000 times as part of the Maritime Interception Operations (MIO) instituted by the U.N. The Multinational Interception Force (MIF) has involved more than 100 ships from 14 nations and has diverted 637 suspected sanctions violators.

The MIF was created following the Gulf War to ensure an undisturbed flow of humanitarian goods to and from Iraq, while stopping illegal shipments of oil from Iraqi ports.

Today, the Navy maintains five MIF ships in the Gulf. Together with ships from the United Kingdom, Canada, Belgium, New Zealand, Italy, the Netherlands and Australia, they patrol the waters of the Arabian Gulf to ensure the sanctions imposed by the international community are respected and obeyed.



Photo By PH2 Rebecca Kearns

(above) SR Desby stands bridge lookout watch aboard the guided-missile destroyer USS *John S. McCain* (DDG 56).



Photo By PH2 Jason Carter

(right) OS2 (SW) Christopher Pierce conducts a security sweep of a suspected smuggling vessel.



USN Photo

(above) A U.S. Navy Visit, Board, Search and Seizure (VBSS) Team, serving on board the U.S. Navy's *Ticonderoga*-Class Cruiser USS *Valley Forge* (CG 50), physically inspects a merchant ship in support of U.N. sanctions enforced against Iraq in the Arabian Gulf during Maritime Intercept.

(right) BM2 Phillip Arredondo, USCG, assists LTJG Richard Daugherty in reviewing the passports of the crew of a suspected smuggling ship.



Photo By PH2 Jason Carter

(below) ET2 Richard McDonnell of Indianapolis, Ind., (right) receives information from an off-going watchstander as USS *Carney* (DDG 64) conducts Multinational Interception Operations.



Photo By PH2 Felix Garza



Photo By PH2 Felix Garza

(above) ST1 Anthony McCoy passes provisions over to crew members from USS *Carney* (DDG 64) preparing to stand the next 12-hour watch on an oil tanker in the Arabian Gulf.

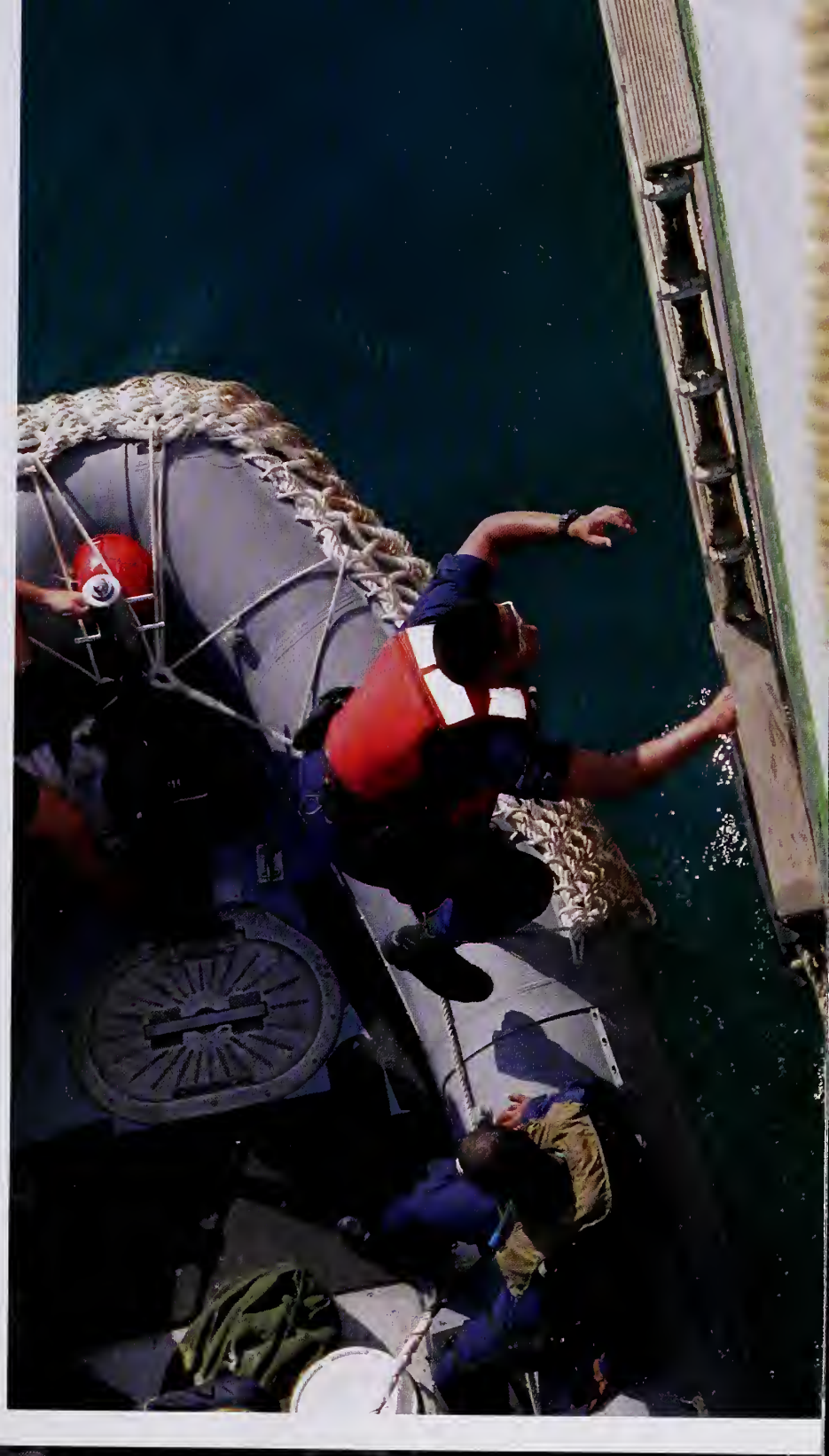


Photo By PH2 Jason Carter

(above) BM2 Phillip Arredondo, USCG, jumps from the RHIB boat to a suspected smuggling vessel during a VBSS team boarding.

C.O.D.

Craftmasters bring Sailors and Marines to the fight

By JO1 Rodney J. Furry

SOME OF THE BRAVEST FIGURES OF THE SOUTH PACIFIC ISLAND CAMPAIGNS DURING WORLD WAR II WERE U.S. NAVY CRAFTMASTERS. TO HEAR THE STORIES OF BATTLE-WEARY COXSWAINS WHO MADE TRIP AFTER TRIP THROUGH A RAIN OF HEAVY FIRE AND POUNDING SURF TO LAND MARINES AND EQUIPMENT ON HOSTILE BEACHES IS TO HEAR THE STORIES OF HEROES.



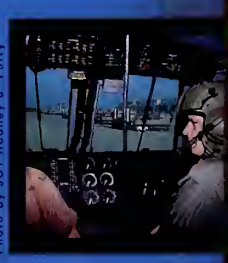


Photo by JO1 Rodney J. Furry

Combat on Delivery



Photo by JO2 Richard Henson

A Landing Craft Air Cushon (LCAC) hovers on station before entering the well deck of USS *Fort Fisher* (LSD 40).

Although warfare has changed through the years, the responsibilities of the craftmaster and the inherent dangers of the job remain the same – to get personnel and equipment into the fight.

From the pier, Landing Craft Utility (LCU) 1633 doesn't look much different than its island-hopping ancestors. But upon closer inspection, it's clear that Boatswain's Mate 1st Class (SW) Frank W. Hagan, Craftmaster of Assault Craft Unit (ACU) 1, and his crew take great pride in keeping the 30-year-old boat looking new.

The authority and accountability for the $6 million boat rests directly on the shoulders of the craftmaster. "It's not much different from being the skipper of a large ship. I'm responsible for the crew, the ship and the mission," said Hagan.

Hagan speaks highly of his small crew. "It's not hard running this boat with a crew like this. We may only have 11, but each one is a first-rate Sailor."

The qualification process to become a craftmaster is rigorous and, according to Hagan, it must be augmented by years of practical application and on-the-job training. "The knowledge I gained in the fleet is what really prepared me for this job. I brought a lot of experience as a boat coxswain and LPO, and I had spent time aboard amphibs."

Maneuvering a work-horse like an LCU in and out of an amphib's well deck is one thing, but what's a craftmaster to do when he has the urge to fly? With a top speed of more than 40 knots, the Landing Craft Air Cushion (LCAC) is the Navy's high-tech answer. While LCU's have the backbone for heavier loads, LCAC's can get up the beach and down the throats of the enemy; but it takes a craftmaster with the nerve and concentration of a fighter pilot to get them there.



Photo by JO1 Rodney J. Furry

Navy Landing Craft Air Cushon (LCAC)



Photo by PHAN Angela B. Jones

Ramp Marshall PC3 Bice directs an LCAC from *Assault Craft Unit 4* ashore to retrieve another piece of equipment and ferry it back to USS *Gunston Hall* (LSD 44).

"It's amazing how many things you have to pay attention to when you're moving at the speed we do," said ? Senior Chief (SW/AW) Brian R. Lanear, an LCAC craftmaster with ACU 5, Camp Pendleton, Calif. "You have to be able to listen to your navigator, engineer and the radio and drive the boat while making spilt-second decisions. That's tough at 40 knots."

Commanding a hovercraft, with its $26 million price tag and crew of five, may seem like a big responsibility for an enlisted Sailor, but according to Lanear it's a testament to the skill of the Navy's experienced boat drivers.

"Most of us have a lot of experience with the rules of the road, mechanics and leadership. I've driven just about every type of boat the Navy has in my career," he said.

That type of knowledge is a prerequisite for the job and the reason why it takes a chief to be a craftmaster in charge of an LCAC. Before taking the pilot's seat, they endure a six-month barrage of tests including an



Photo by JO1 Rodney J. Furrr

QMC (SW) Kenneth B. Curtiss, of Inkster, Mich., completes a pre-flight inspection of his LCAC's engines.



Photo by SN Brent Kelsey

Shipboard preservation is just another one of those things Midshipman 3rd Class Michael DiGangi has to learn on YP 686. BMC (SW) Hector Zayas shows him where to place the needle gun.

SN John L. Hampton shows Midshipman 3rd Class Machael Digangi some of the finer points of chart work.

Underway Instruction

Craftmasters use YPs to inject salt into the veins of Naval Academy midshipmen



Photo by PH2 Joseph Gunder III

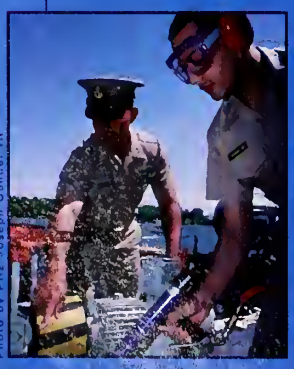


Photo by PH2 Joseph Gunder III

What weighs 172 tons, is 128 feet long and teaches? Give up?

The Navy is using the experience of Craftmasters to teach its future officers the basics of shiphandling.

21 Craftmasters and 21 Yard Patrols routinely make the trip across the Severn River to teach Naval Academy midshipmen how to do everything from relieving the watch to cooking meals underway.

These YPs can berth 31 people, including the crew of five active-duty Sailors. The midshipmen normally get underway for quick weekend trips up the coast, but, during the summer, trips can last two weeks. "We get underway and go to New York and Boston," said Midshipmen 3rd Class Mike J. DiGangio, a Yonkers, N.Y., native. "We get to feel what its like to take Navy showers and sleep in standard-issue bunks."

"Its not a six-month cruise but it gives them a taste of the real Navy," said Chief Quarter Master (SW) Eric W. Russell, craftmaster of "Coastal Explorer" YP 686. "Its my job to bring them the real Navy."

The enlisted crew instructs the midshipmen in navigation, fire fighting, line handling and deck seamanship to name a few



A U.S. Navy Landing Craft Unit (LCU) embarks aboard the amphibious assault ship USS *Peleliu* (LHA 5) with heavy equipment during exercise Kernel Blitz '97.



Photo by PH2 Keith W. Devinney

The U.S.-bound Marine Amphibious Rediness Group (COMPHIBRON 6) pulls into Naval Station Rota, Spain, to do the necessary washdown and inspection of equipment.

aviation physical, psychological evaluations and numerous hours in a simulator.

"We really earn the status that goes with wearing this pin," said Quartermaster Chief (SW) Randy T. Dickson. "We can get the Marines and their equipment on 70 percent of the world's beaches quickly and safely."

It takes an exceptional amount of confidence and years of experience to command boats such as these. It is a responsibility that is not taken lightly. You won't find many craftmaster pins around the fleet, but those you do find will be worn by individuals with the courage and skill to continue an historic legacy of on-time delivery. Navy craftmasters get their cargo where it has to go.

Furry is a San diego-based photojournalist assigned to All Hands.

"They know what I am telling them is from real experience," said Seaman John L. Hampton, Jr., a deck seaman assigned to YP 686. "Its not like they're reading it from a book. They're getting it from someone who does it everyday."

What truly makes this enlisted/midshipmen team work is the humble attitudes and professionalism exemplified by the craftmasters themselves.

"We all do the best job we can to help those midshipmen. If we don't do the job right then that individual, the Navy and the country is going to suffer. If, when all is said and done, I have not imparted to these young men and women what the Navy has taught me, then I haven't done my job."

Story by JO2 Jeremy Allen, a photojournalist assigned to All Hands.



Photo provided by USNA Public Affairs

Three of the Naval Academy's 12 YPs cruise along the Severn River.

t's the Navy's floating classroom and part of the haze

gray fleet of Yard Patrol boats docked at Naval Station Annapolis, Md.



BM1 James E. Williams after receiving Medal of Honor in 1968.

By Patricia Oladeinde

RIVERBOAT GAMBLER

BM1 Williams, the most decorated enlisted Sailor in the U.S. Navy's history, recently sat down for a candid conversation with *All Hands'* staff writer Patricia Oladeinde about the Navy, his life and one hot day in Vietnam in 1966.



Williams *at the ready.* This photo of Williams was taken during one of his numerous patrols on board the "ELAINE." He stands ready with an M-60 machine gun.



Boatswain's Mate 1st Class James Elliott Williams never intended to be a hero — he just wanted to be a Sailor.

"When I was 16, I convinced the county clerk to alter my birth certificate so I could come into the Navy. Boy was I proud. I thought there was nothing better than servin' my country and gettin' paid for it."

But Williams' first experience at sea was less than glorious. In fact, it was downright boring.

"The first ship I drew, I was the most disappointed man in the world. I'd joined the Navy to ride the waves and see the world — and doggonit, I wasn't moving. I'd got orders to an LST that just sat around a buoy in San Diego harbor."

But from that experience, Williams learned a valuable lesson about discipline and leadership.

"An old chief named Hasley told me, 'Son, you got to learn to take orders, even if you disagree with them. That's the first step to being a good Sailor and a good leader. If you can't take orders now, you certainly won't be respected when you give them later.' Well, I got the message. Learning discipline was the springboard that helped my Navy career.

"From then on, I had the sharpest damn knife and the shiniest shoes in the Navy. That's what I was taught. That's what I believed in, being a good Sailor.

"The proudest day of my life had nothing to do with medals, ribbons or citations. It was when they made me a patrol officer. That position was held only by chiefs and officers. It showed the trust the Navy had placed in me.

"I always wanted the opportunity to show what I could do. This Vietnam thing was it for me. After 20-something years, the Navy gave me the chance to do my job."

On his first day out, Williams didn't dissappoint.

"October 31, 1966, was supposed to be a restful day in the steamy, heartland of the Viet Cong. But it's one of those times I won't never forget, no matter how hard I try. I just can't.

"We were on a day patrol, kind of like the 'relax and recreation' patrol — nothin' too heavy. We were only gonna check a few boats coming down the Mekong River for contraband.

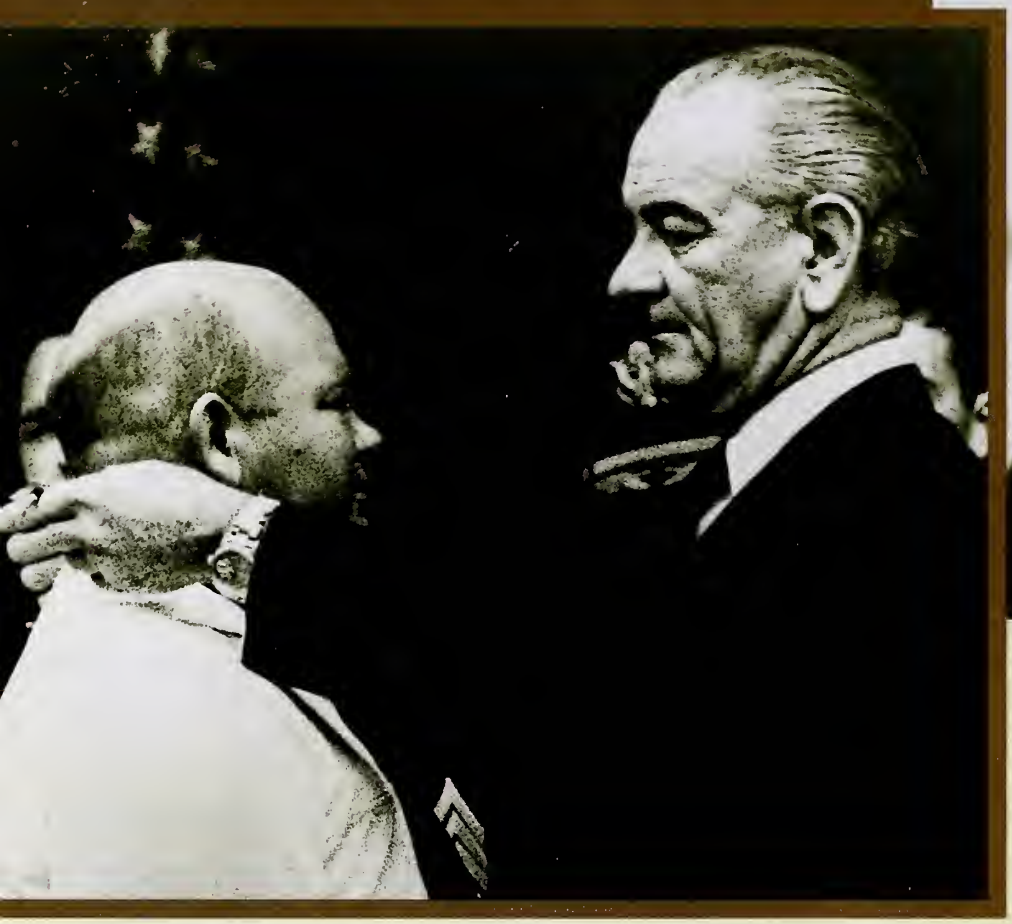
"We were just moseying on down the river minding our own business when our forward gunner, Rubin G. Binder, out of Blackbeach, N.Y., hollered to the crew,

> "I had the sharpest damn knife and the shiniest shoes in the Navy. That's what I was taught. That's what I believed in, being a good Sailor."
>
> – BM1 James Williams

Williams' crew of PBR 105: (from left) Seaman Rubin Binder, Williams, Electronics Technician Third Class Robert Castleberry, and Shipfitter-Metalsmith Second Class Henry L. Fisher.



Williams receiving the Medal of Honor from President Lyndon B. Johnson.



'there's two fast-speed boats crossing ahead of us.'

"Now we had learned if you saw one of these sampans, it was something. It usually meant there was some high-ranking North Vietnamese officer on board — and that meant trouble; as soon as the Viet Cong spotted us, they started firing."

The two boats split, one headed for the north bank, the other went east. Williams and his crew broke off with the north-bound boat and sunk it before it could reach the river's edge.

The thirty-six-year-old Williams, affectionately called "Old Man" by his crew of mostly 19- and 20-year olds, then turned for the second boat. Just as he was about to open fire, the sampan made a sharp turn into an eight-foot-wide canal in front of a rice paddy. Williams and his crew of Patrol River Boat (PBR) 105 couldn't follow.

"I looked at the map and saw that I could go to the right maybe for a third of a mile and come back to where he would have to come out. We wanted to get them real bad. I went around that corner at max speed to cut him off — and, lo and behold, I looked up and didn't see nothing but boats and people and more boats and more people."

Williams had unwittingly stumbled into a first staging area and there was no way out but straight ahead. With bullets flying and guns blazing, Williams slammed the throttle down and pulled the wheel hard left, creating a large wake which slapped against the hull of the sampan and disrupted the enemy's aim. Williams then took PBR 105 at full speed through the middle of the formation, causing mass confusion.

"Fire came from all directions. But their aim was off that day 'cause they was shootin' and hittin' more of each other than we was."

With some crafty boat handling, Williams zigzagged his way through the staging area while his crew returned the enemy's fire. But, the cliche, "out of the frying pan and into the fire," was about to become much more real for Williams and his crew.

"We get though this area and I'm trying to high-tail it back. We got around the next corner and by God! there's another staging area. We had to just fight. There



When it was all over, Williams, with just two boats and 10 men, had sunk 65 enemy boats and eliminated 1,200 enemy troops.

was no way out. I twisted, crisscrossed and turned that PBR. I did whatever I could to get them off our backs."

The fight lasted for three and a half hours. When it was all over, Williams, with just two boats and 10 men, had sunk 65 enemy boats and eliminated 1,200 enemy troops.

"It's hard to believe the first day we were out, we got blasted to hell and back and nobody got killed."

For his heroic actions that day, Williams was awarded the Congressional Medal of Honor. But he is quick to admonish anyone who wants to talk about his awards.

"You gotta stop and think about your shipmates. That's what makes you a great person and a great leader — taking care of each other. You've got to think — team. It takes a team to win any battle, not an individual."

But on one particular day in 1966, this individual made the team unbeatable.

Oladeinde is a staff writer for All Hands.
Photos courtesy of BM1 Williams.

"During the monsoon season, the temperatures were unbearable. The humidity was so high our clothes literally started rotting. When I came home, my total seabag was ruined. When I went up to receive the Medal of Honor from President Johnson, the Navy had to buy me a white uniform. I didn't have one." – BM1 James Williams.



Listed below are military decorations received by BM1 James E. Williams during his Vietnam Service. He was made an honorary chief in 1975.

- Congressional Medal of Honor
- Navy Cross
- Silver Star (two awards)
- Navy and Marine Corps Medal (two awards)
- Bronze Star (three awards)
- Purple Heart (three awards)
- Navy Commendation Medal with Combat Distinguishing Device
- Presidential Unit Citation (two awards)
- Good Conduct Medal (five awards)
- National Defense Service Medal (one star)
- Korean Service Medal (two stars)
- Vietnam Service Medal (one star)
- Republic of Korea Presidential Unit Citation
- Vietnam Cross of Gallantry with gold star
- Vietnam Cross of Gallantry with palm
- United Nations Service Medal
- Republic of Vietnam Campaign Medal

By JO1 Ron Schafer

Cave Dwellers

The Navy's ability to land Marines ashore



Photo by PH2 Benjamin Lewis

With little margin for error, an LCAC from *Assault Craft Unit 5* (ACU-5) approaches *Essex's* well deck.

Imagine working in a cave — it's dark, it's damp, the noise is almost deafening as every sound reverberates against the massive steel walls, echoing in an endless pattern of mayhem. Now flood that cave, crank the winds up to more than 200 mph, add an unhealthy dose of diesel exhaust and you are on your way to understanding what it's like to live and work in the well deck of an amphib.

nywhere in the world begins in the well deck.

These cavernous spaces found on most large-deck amphibs are as vital to landing operations as a carrier's flight deck is to air strikes. It is here that landing craft are loaded with vehicles, equipment and troops before beginning their hazardous journey towards the beach. Sailors who work the well deck and brave its less-than-glamorous conditions display an enthusiasm and versatility that set apart today's "Gator" Navy.

"Well deck operations are a combination of all the training a boatswain's mate receives," said LT Jon Lux, USS *Essex*'s (LHD 2) first lieutenant. "We're doing boat ops, loading cargo, loading ammo and refueling during each evolution. We're the beginning of an amphibious assault. If we don't get the LCAC's (landing craft air cushion) out, it doesn't go off."

Depending on the ship type, well decks may accommodate LCACs, LCUs (landing craft utility), LCMs (landing craft mechanized) or a number of smaller amphibious vehicles. Aboard *Essex*, the well deck measures 430 feet long and 50 feet wide. When empty, it may appear huge. But place three LCACs (each measuring 88 feet by 47 feet) into it and suddenly the space resembles the Washington, D.C., beltway on the 4th of July weekend.

They're working under adverse conditions — high winds, salt spray



BM2 James Moody directs an LCAC from ACU-5 (Det. Echo) into *Essex*'s well deck.

Photo by PH2 Benjamin Lewis





Photo by PH3 Robert Houlihan

LT Jon Lux, *Essex*'s first lieutenant, stays in constant communication with LCAC craft masters as they enter the well deck.

According to Boatswain's Mate 2nd Class (SW/CC) Harry Hill, a native of Springfield, Mass., "There's only a few feet on either side to maneuver the landing craft, so there's not much room for error."

Errors could be costly in terms of dollars, lives and mission success.

"You've got an E-4 down there bringing in a multi-million dollar LCAC," Lux said. "They're directly responsible for it. They're working under adverse conditions — high winds, salt spray and loud noise. They really have to stay on their toes and pay attention to detail."

During operations involving LCUs, LCMs and other amphibious vehicles, the well deck is "flooded" with sea water, transforming a once-dry work area into an indoor lake of pre-determined depth. Once afloat, the loaded landing craft depart through the stern gate. LCACs, because they float on air rather than water, do not need the decks flooded to operate. Instead, they are preloaded and, once the stern gate has been lowered, accelerate their powerful engines as they depart the ship.

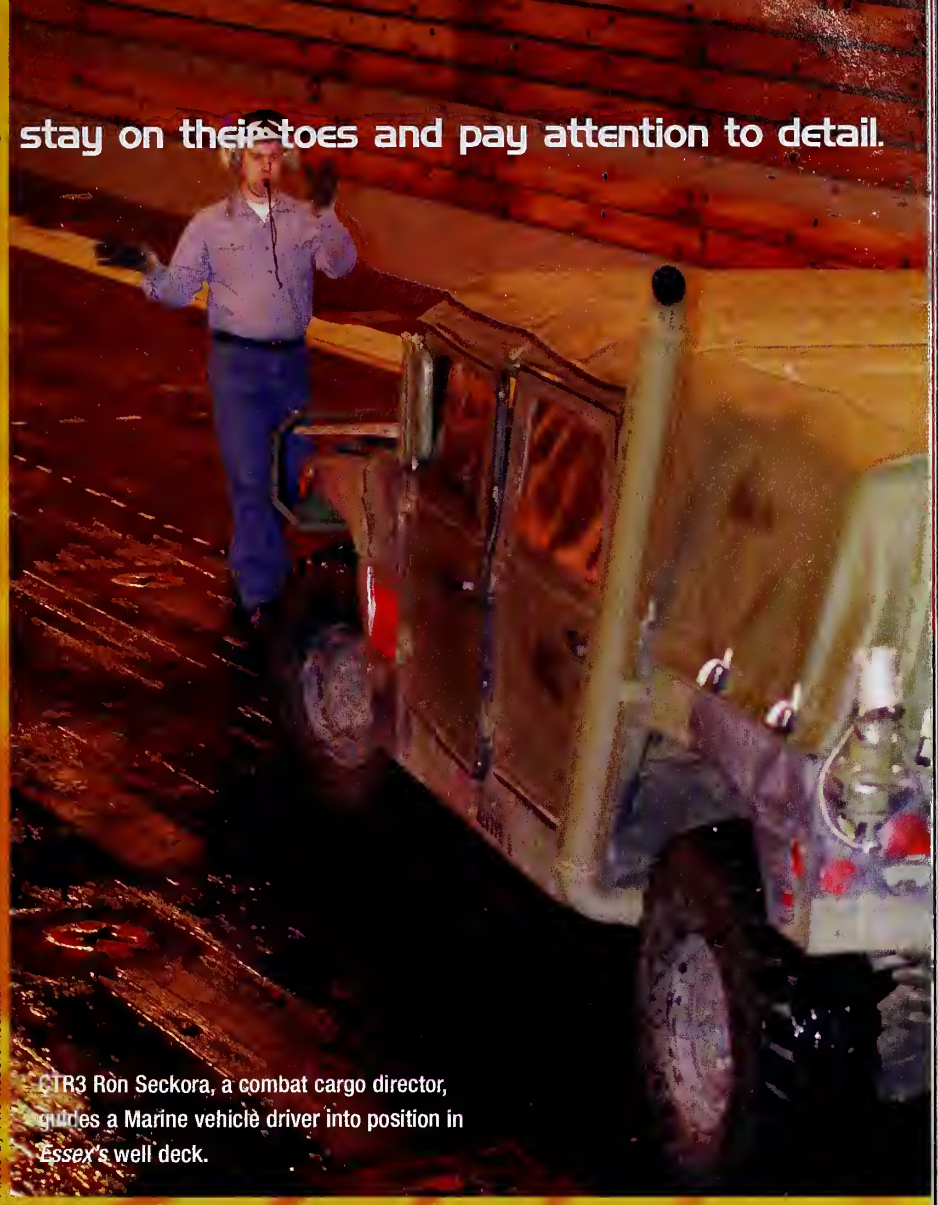
"When the last LCAC takes off," Hill said, "it's 60 feet away. The jet blast feels like fire. It's definitely dangerous."

oud noise. They really have to stay on their toes and pay attention to detail.



LCAC 29 from ACU-5 (Det. Echo) returns to *Essex's* well deck.

Photo by PH1 (AW) Charles Abell



CTR3 Ron Seckora, a combat cargo director, guides a Marine vehicle driver into position in *Essex's* well deck.

Photo by PH3 Robert Houlihan

What goes into a well deck?

The well decks of the U.S. Navy's amphibious ships can accommodate a variety of landing craft.

LCAC (landing craft, air cushion): 87'11" long/47' wide; displaces 87.2 tons (no load) to 182 tons (full load); 4 gas turbines (2 for propulsion/2 for lift) generate 16,000 hp.

LCU (landing craft, utility): 134'9" long/29' wide; displaces 200 tons (no load) to 437 tons (full load); 4 diesel engines/twin shaft generate approximately 680 hp.

LCM (landing craft, mechanized) 8: 73'7" long/21 feet wide; displaces 105 tons (full load); 2 diesel engines/twin shaft generate 680 hp.

LCM (landing craft, mechanized) 6: 56'2" long/14 feet wide; displaces 64 tons (full load); 2 diesel engines/twin shaft generate 460 hp.

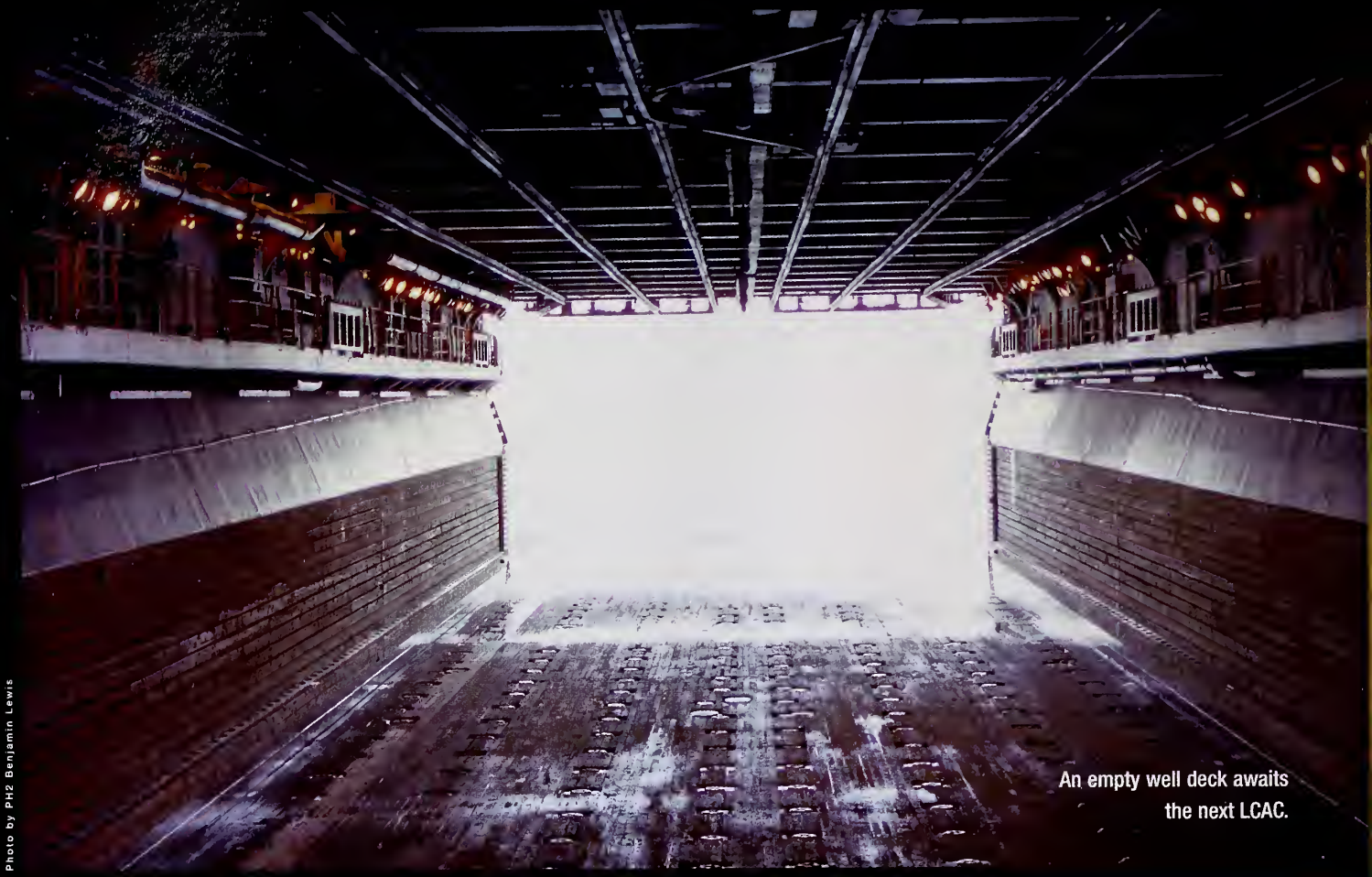


Photo by PH2 Benjamin Lewis

An empty well deck awaits the next LCAC.

It takes precise coordination with the bridge and debark control to move an LCAC in and out of the well deck

As LCACs take over the role as primary amphibious landing craft, the need for "wet well" operation is diminishing. However, the need for safety and expert skill among the boatswain's mates, damage controlmen, hull technicians, electricians and officers remains.

"It takes precise coordination with the bridge and debark control to move an LCAC in and out of the well deck," said LT Bill Marker, Essex's assistant 1st lieutenant. "It's a lot like flight ops, as far as the coordination and teamwork involved."

These "caves," and the men and women who operate them, give the Navy the unique ability to land Marines, tanks, guns and equipment on almost any coast in the world, projecting power and delivering one hell of a punch.

This story was compiled by JO1 Ron Schafer, a Norfolk-based staff writer for All Hands, *and the public affairs staff, USS* Essex *(LHD 2).*

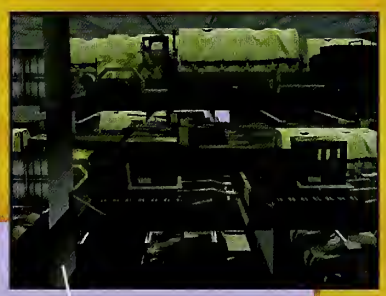
New Age Gator

The first ship of the new LPD 17 class has been christened *San Antonio*. She will take the "Gator" Navy into the 21st century.

Scheduled to join the fleet in 2002, LPD 17 will combine state-of-the-art construction and amphibious capabilities with vertical missile-launch systems and developing network technologies.



Unlike conventional landing craft, LCACs do not require "flooding" of the well deck for launch. The well deck crew needs only to drop the stern gate for troops and equipment to be on their way.



The ship's three vehicle decks will have 25,000 square feet to carry tanks, humvees and artillery. LPD 17 will also be capable of carrying multiple CH-46 *Sea Knight* and CH-53 *Sea Stallion* helicopters as well as the new MV-22 *Osprey* tilt-rotor aircraft.



The ship's well deck will be able to accommodate two LCACs. These versatile hovercraft weigh 87 tons, are capable of reaching speeds in excess of 40 knots and can deliver loads approaching 60 tons.



From the well deck control booth, Sailors will coordinate loading, launch and recovery operations.

Graphics courtesy of Naval Sea Systems Command

State of t

SHIPS BUILT FOR

High-Te

IC3 Melanie Hawley, from Hammond, Ind., inspects the setting of the WSN5 nautical navigation system found on USS *McFaul* (DDG 74).



Photo by PHAN Leon Gonzalez

(Background) TMSN Daniel D. Carter, from Washington D.C., adjusts the air pressure valve of the ship's external torpedo launcher.

he Art ch

SAILORS

By JO2 Jason Thompson

You name it, this warship's got it. From bow to stern, crow's nest to engine room, the fleet's newest guided-missile destroyer, USS *McFaul* (DDG 74), is equipped with some of the most sophisticated weaponry the world has ever seen.

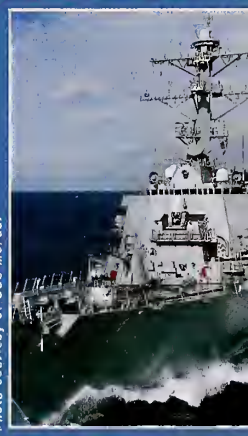


Photo courtesy of USS *McFaul*

But state-of-the-art ships are worthless without high-tech Sailors to operate and maintain them. And, as technology gets more complex, Sailors must keep pace to maintain their warfighting edge.

"Every time a new ship is built, more and more technology is incorporated," said Chief Operations Specialist (SW/AW) Mark Sansing. "The Sailors reporting aboard this ship are coming with a new set of skills to match that technology."

Learning to operate and maintain systems which incorporate cutting edge technology isn't something *McFaul*'s crew members acquired overnight. Most of *McFaul's* Sailors studied anywhere from 12 to 24 months in Navy schools before reporting on board.

For example, Fire Controlman 3rd Class Troy Kelly spent two years in Navy schools before being hand-picked to work on *McFaul's Phalanx* Close-In Weapons System (CIWS). Now, the

Photo by PHAN Lena Gonzalez



Photo by JO2 Jason Thompson

FC3 Nolan Pitts (left) and FC3 Troy Kelley break down and clean 20mm barrels of *McFaul*'s aft *Phalanx* Close-in Weapons System (CIWS). The two fire controlmen spent a total of two years in Navy schools before qualifying to operate, fix and maintain the fast-reaction, rapid-fire gun system. *Phalanx* is designed to engage anti-ship cruise missles and fixed-wing aircraft at short range and can fire up to 4,500 rounds per minute.



A standard surface-to-air missile leaves the forward Vertical Launching System (VLS) of the *Aegis* guided-missile destroyer USS *McFaul* (DDG 74). The missile intercepted a down-range unmanned drone during November 1997 predelivery sea trials in the Gulf of Mexico.

Photo courtesy of USS *McFaul*



Photo by PHAN Lena Gonzalez

EW3 Christopher Mosley from Palm Harbour, Fla., detects radio frequencies from other ships with the slick 32 radar. By using this system, Mosley can tell what type of radar other ships use as well as determine potential threats to USS *McFaul*.

22-year-old Sailor is responsible for operating, fixing and maintaining the aft CIWS.

"It takes a trustworthy person to do what I do," said the San Bernadino, Calif., native. "I work on a very deadly weapon."

Technological improvements on the *McFaul* have improved mission effectiveness by a large margin. But that technology isn't limited to high-profile weapons systems. Sometimes it is the more mundane advancements that make the most difference. For example, in each of the ship's engine rooms a central computerized console called the Ship Control Unit (SCU) has been designed and installed to remotely monitor each engineering space, giving snipes a breakdown of the entire system. If a piece of equipment breaks down, the SCU tells them the source of the problem.

"The equipment is doing more of the work, making it easier for us to do the job and concentrate on other areas," said Gas Turbine System (Electrician) Kevin Garner of Town Creek, Ala. "It also gives supervisors a lot more time to sit



Photo by JO2 Jason Thompson

SN Hazel Shillingford, a 20-year-old Sailor from New York, N.Y., looks for surface and air contacts as the aft lookout.



Photo by PHAN Lena Gonzalez

TM1 Kathleen Walsh prepares the torpedo H.P. air flask for a simulated launching.



down with their junior people and explain how the overall system works — not just one piece of equipment."

More time for training means Sailors can focus on working smarter, not harder.

Fire Controlmen Chief Scott Chism, the ship's combat systems maintenance manager, said that during his 14 years in the Navy, maintaining shipboard equipment has become less labor-intensive.

"It takes a lot of brain power to fix this equipment," explained the New York, N.Y., native. "There's less turning of wrenches and screwdrivers and more thinking about where the problems are."

Navy technology is moving full-speed ahead and it is rapidly changing the way we do business. At the helm of this awesome technology are highly-trained Sailors like the men and women stationed aboard USS *McFaul*. They are ready to take the Navy into the 21st century and beyond.

Thompson is a photojournalist assigned to All Hands.



DDG 74 is named in honor of Chief Engineman Donald L. McFaul (1957-1989), a Navy SEAL killed in action during the United States' invasion of Panama.

According to his Navy Cross citation (awarded posthumously), McFaul was serving as platoon chief of SEAL Team 4 at Paitilla Airfield, Republic of Panama, during Operation *Just Cause* when, in the absence of effective cover fire and with disregard for his own personal safety, he entered the "kill zone" to rescue his teammates.

As he attempted to pull a seriously wounded comrade to safety, McFaul was raked by enemy automatic weapons fire. Succumbing to his mortal wounds, McFaul laid himself across his teammate, protecting him from enemy fire.

"ENC McFaul demonstrated the highest possible sacrifice and valor. His extraordinarily heroic actions, in total disregard for his personal safety, saved the life of his comrade and set the highest possible standard for leadership in combat."

By JO1 Ron Schafer

BUSTED!

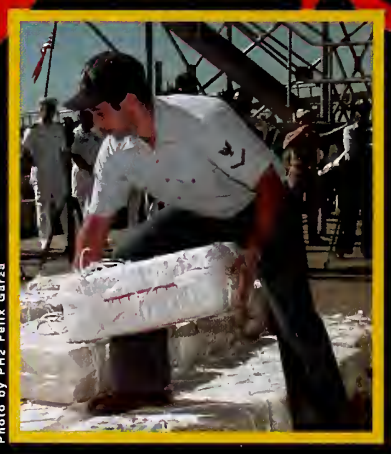


Photo by PH2 Felix Garza

The statistics are hard to ignore. An estimated 12.8 million Americans use illegal drugs each month. The annual price in social, health and criminal costs runs approximately $67 billion. To break that down even further, substance abuse in the United States costs every man, woman and child nearly $1,000 a year.

Something has got to give.



Photo by PH2 Felix Garza

(Above) Sailors from the guided-missile destroyer USS *Callaghan* (DDG 994) help offload bails of cocaine at Naval Station San Diego. During a recent counter-drug deployment to the Caribbean and Eastern Pacific, *Callaghan* seized more than 3.5 metric tons of cocaine. Street value of the cocaine was estimated at more than $165 million. It was the largest seizure of illegal narcotics by a Navy ship in 1997.



U.S. Navy Photo

A merchant ship in the Caribbean moments before being halted by the U.S. Coast Guard.

In the warm waters of the Eastern Pacific and the Caribbean, something is.

Established in September 1995, the Western Hemisphere Group (WESTHEMGRU) is responsible for naval operations in the region. WESTHEMGRU was created with two primary objectives. First, it allowed homeports to be adjusted so that ships would be closer to deployment patterns. This reduced fuel costs, underway time and response time for contingency situations.

Second, it reduced instability among battle group deployers within the Atlantic Fleet by concentrating ships on counter-drug operations and UNITAS. Through integration with the Joint Interagency Task Force (JIATF) East at Naval Air Station, Key West, Fla., and the U.S. Coast Guard, the 15 ships under its command make WESTHEMGRU the most significant force in counter-drug operations in the area.

"The western hemisphere is in one of the world's most democratic and economically dynamic regions," said RADM James

B. Ferguson, commander, WESTHEMGRU. "But the potential for instability is always there. Here is where we must focus on different operations like drug interdiction, migration, human rights and humanitarian assistance."

Using intelligence gathering assets on land, sea and in the air, JIATF East conducts detection and monitoring efforts in the region. When a drug smuggling event is detected, the case is passed on to law enforcement agents who are then able to interdict the drugs and arrest the smugglers. In most cases, those agents operate onboard WESTHEMGRU vessels and conduct boarding and seizures directly from U.S. Navy ships.

The boarding of a merchant vessel is a highly-orchestrated and specific procedure. After being directed to intercept, a U.S. Coast Guard Law Enforcement Detachment (LEDET) will conduct right-of-approach and pre-boarding questioning via radio with the captain of the suspect vessel to determine legal guidelines for the boarding as well as to ensure the safety of the boarding party.

"We'll give them instructions on what to do with their crew. We will have them all muster in one location, usually on the exterior of the ship so we can see them as we come aboard," explained Quartermaster 1st Class Keith A. Robbers, assistant officer-in-charge of USG Leeds 5 Delta, from aboard *USS Ticonderoga* (CG 47).

At that point, the boarding officer will check cargo manifests and other documentation as the sweep team begins a systematic search of the ship looking for indicators of drug trade or traffic.

"[We look for] an old boat with new body work, slide marks, maybe a smell, things of that nature," said Boatswain's Mate 2nd Class Michael A. Ford, operations petty officer, USG Leeds 5 Delta. "We have testing gear now where we can wipe a certain area with a cloth and have it tested to let us know if there are drugs in that area."

With boarding performed on a routine basis, intelligence gathering is a constant priority and, according to Ford, crucial to counter-drug patrols.

"Every vessel we come across, we build up a data base of information on them. When we return to our unit, we send that information out so it gets distributed throughout the Coast Guard and throughout the intelligence network," Ford said.

That intelligence network, as well as a physical fleet presence, help create a deterrent that is key to the entire counter-drug philosophy. That's not to say that WESTHEMGRU ships don't ever get the bad guys.

In 1996, WESTHEMGRU ships participated in busts resulting in the seizure of 11.7 metric tons of cocaine at an estimated value of $199.1 million. One of those busts, by *USS Ticonderoga* (CG 47), netted more than half of that total making it the second largest maritime seizure in U.S. history.

Those results are not lost on *Ticonderoga* Sailors, many of whom feel they have a personal stake in their mission.

Operations Specialist 2nd Class (SW) Paul F. Casteneda, a counter-drug air coordinator aboard *Ticonderoga* is responsible for keeping track of the air assets gathering intelligence in the region. A native of Espanola, N.M, he said that being involved in counter-drug operations really hits home as a parent.

"I've got three children myself so that helps keep me going out here knowing that everything I keep out of our country is something that my kids or my family won't have to deal with."

"Drugs were a big deal where I grew up," said Mess Specialist 3rd Class Jose M. Huerta, who grew up in San Antonio, Texas. "Being out here makes you feel better. It's making the streets safer, not just in my area but all over. It bothers me because I have a daughter. Every time we make a bust, it makes me think that maybe she'll be growing up in better conditions than I did."

Schafer is a Norfolk-based photojournalist for All Hands.

Top 10 Cocaine Seizures

	Date	Vessel	Pounds	Interceptor
1.	07/27/95	*Nataly I*	24,325	LEDET/U.S. Navy
2.	11/20/93	*Oso IV*	14,971	LEDET/U.S. Navy
3.	10/15/96	*Don Celso*	14,960	LEDET/*Ticonderoga*
4.	10/03/93	*Daniel Torres*	13,472	CGC *Morganthau*
5.	10/01/96	*Limerick*	12,994	CGC *Seneca*
6.	10/02/89	*Zedom Sea*	*12,207*	*CGC Cushing*
7.	05/11/93	*Sea Chariot*	11,233	LEDET/U.S. Navy
8.	07/21/91	*Hunter*	10,771	CGC *Adak*
9.	01/06/92	*Harbour*	9,634	CGC *Campbell*
10.	09/27/97	*Sea Ranger*	8,500*	LEDET/*Callaghan*

* Estimated Street Value $165 million



EMFN Augustus Davies performs duties as sound security watch aboard USS *Avenger* (MCM-1).

By JO2 Jeremy Allen

Enemy Mine

In the early 1980's, after the USS *Tripoli* (LPH 10) and USS *Samuel B. Roberts* (FFG 58) both hit mines in the Arabian Gulf, the Navy restructured its mine countermeasures (MCM) force around two new classes of ships, the "mine-countermeasure" *Avenger* (MCM 1) class and "mine-hunter" *Osprey* (MHC) class. Both classes were designed as mine hunter-killers capable of finding, classifying and destroying moored and bottom mines.



Photo by PH1 Sean P. Jordan

USS *Inchon* (LPH 2) was converted to a mine countermeasures ship (MCS 12) in 1994 to act as a mother-ship for the mine-hunting fleet.

"The ships are made of wooden hull covered in fiberglass to maintain a very low magnetic signature," explained Aviation Boatswain Mate (Fuels) 3rd Class Thomas VanZante, currently onboard USS *Ardent* (MCM 12). "Mines that are attracted to metallic objects won't be activated by this ship."

Minesweepers may not have the most glamorous job in the Navy, but they are nonetheless essential. Without minesweepers, amphibious operations never hit the beach. "It makes me feel proud to know that what I do has direct impact on every other ship in the fleet," said VanZante, a Central City, Iowa, native. "All the amphibious forces depend on us to clear a path for them so they can do their job."

"We love going first," said Storekeeper 3rd Class Andrew D. Todd, of Lancaster, Ohio. "Getting everything cleared out of the way makes me feel good. Without minemen, the fleet wouldn't be able to go safely through harbors or waterways."

In order to do their jobs right these ships rely on sonar and video systems, cable cutters and a remote-controlled mine detonating device.

"Sometimes we fly the little remote-controlled robotic submarine down to plant a explosive charge on the mine and blow it up," said Mineman Senior Chief (SW) Richard E. Bell, an instructor at the Mine Warfare Training Center, Ingleside, Texas. "It basically is a very large version of what you saw in the movie *Titanic*. It has a camera, an umbilical cord and cutter arms."

Mine countermeasure ships are also capable of conventional sweeping



Photo by PH1 Jonathan P. Guzman.

The USS *Ardent* (MCM 12) can use many tools to detect mines. Here, a mine neutralization vehicle is lowered into the water to conduct mine-hunting drills in the Arabian Gulf.

measures. "The MCM is 224 feet long and has the ability to pull mechanical, magnetic or acoustic sweep gear behind her," said Bell. "The MHC is 188 feet long and only hunts for mines."

The Navy converted the amphibious assault ship USS *Inchon* (LPH 2) to a mine countermeasure ship (MCS 12) in 1994 to act as a "mother ship" for the mine-hunting fleet.

Mines are a relatively cheap way for third-world countries to inflict significant damage to enemy forces. "Terrorist countries can buy a mine for a couple hundred dollars and drop it out of a plane for relatively nothing," explained VanZante, "So until there is world unity, we will always have a need for mine warfare."

Allen is a journalist assigned to All Hands.

Avenger Class Ships

USS *Avenger* (MCM 1)
USS *Defender* (MCM 2)
USS *Sentry* (MCM 3)
USS *Champion* (MCM 4)
USS *Guardian* (MCM 5)
USS *Devastator* (MCM 6)
USS *Patriot* (MCM 7)
USS *Scout* (MCM 8)
USS *Pioneer* (MCM 9)
USS *Warrior* (MCM 10)
USS *Gladiator* (MCM 11)
USS *Ardent* (MCM 12)
USS *Dextrous* (MCM 13)
USS *Chief* (MCM 14)

Crew: 8 officers, 76 enlisted
Armament: Mine neutralization system, two .50 caliber machine guns

Osprey class Ships

USS *Osprey* (MHC 51)
USS *Heron* (MHC 52)
USS *Pelican* (MHC 53)
USS *Robin* (MHC 54)
USS *Oriole* (MHC 55)
USS *Kingfisher* (MHC 56)
USS *Cormorant* (MHC 57)
USS *Black Hawk* (MHC 58)
USS *Falcon* (MHC 59)
USS *Cardinal* (MHC 60)
Under Construction
Raven (MHC 61)
Shrike (MHC 62)

Crew: 5 officers, 46 enlisted
Armament: Mine neutralization system, two .50 caliber machine guns, and other mine countermeasures systems

Warriors

Story and photos by JO2 Cathy Thomas

Even before Chief of Naval Operations ADM Jay L. Johnson made warfare qualifications mandatory for advancement to ranks E-6 and above, Senior Chief Gas Turbine Systems Technician (SW) Roger McCormack had already made it a priority on his ship, USS *Arleigh Burke* (DDG 51).

While on a 1995 Mediterranean deployment, McCormack, a Dumont, N.J., native, looked hard at his ship's Enlisted Surface Warfare Qualification (ESWS) program and realized it could be improved. His first step was to take the ESWS question handbook and break it down by subject matter. From there, McCormack found his ship's experts in each area and had them put together a 280-page answer book that would correspond directly with the existing question book.

"The study guide has answers for each question, so the ESWS candidates have all of the answers right at their fingertips," McCormack said. The book is checked out, much like a library book, and then returned once the candidate has become ESWS qualified.

McCormack's next step was to present the ESWS information in a way the average Sailor would not only understand, but enjoy. "I'll do classroom instruction one day, and the following day I'll do a walk through on the area we talked about the day before," McCormack said. "You



MS1 Emerson (right) and MS2 Reuben Checkley explore the engineering spaces aboard USS *Arleigh Burke*.



BM2 Roy Delosreye (left) and IC3 Jason Burton study the compressor section the LM-2500.

learn more when you combine classroom lecture with hands-on instruction."

Arleigh Burke uses ESWS qualified Sailors in each division to walk candidates through the weapons, propulsion, navigation and communications systems, and any other parts of the ship they are required to know for qualification.

"We've had a lot of people blossom as instructors, and we've had young people who have been ESWS instructors get follow-on orders to shore duty as Navy instructors," McCormack said.

As an instructor, Electrician's Mate 1st Class (SW) Guy Deluzio, from Belton, Texas, tries to ensure every candidate understands his lessons. "I make sure they understand the equipment, and if they don't, I ask them questions so they do understand it."

"The fact that we hold these classes makes it easier for the Sailors. Everything is laid out for them, it's a lot like going to a school or a university, and that helps," said *Arleigh Burke's* Executive Officer, LCDR Larry Tindal.

Arleigh Burke's ESWS program has become a top-of-the-line program by keeping Sailors motivated. The ship posts a roster of ESWS qualified Sailors as well as those working toward becoming qualified. "Master chief lets us post it in the chow line, which is pretty much our Broadway or Times Square, so it has high visibility. Everybody sees how we are doing on the point totals," McCormack said. "The young guys provide a lot of energy. They get qualified and then they go back to their divisions and tell their first classes, 'Hey, I got it, why don't you?'"

Another reason *Arleigh Burke's* ESWS program is such a success is because the ship doesn't focus on ESWS being mandatory for advancement. "I think the word 'mandatory' brings up a negative connotation, like it's another 'I gotta do' requirement being forced on the Sailor. I don't think that's the right way to look at it," McCormack said.

Instead, the senior leadership aboard *Arleigh Burke* tries to emphasize the importance of becoming ESWS qualified. "We are professionals, this is what we do for a living. It doesn't necessarily have to be a wartime situation. Just taking a ship to sea and steaming it in peace time is a challenge and is very dangerous if not done correctly," Tindal said. "We take it very seriously. We depend on each other on this ship. Everybody needs to know what the other guy's job is."

As *Arleigh Burke* Sailors complete their ESWS checklists, they also begin to see the importance of an ESWS qualified ship. "I feel 100 percent better knowing the guy serving beside me knows what to do in an emergency," said Interior Communications Electrician Third Class Jason Burton, an ESWS candidate from Waterbury, Conn. "And, if something does go wrong, we will be able to bond closer together as a ship."

Thomas is a Norfolk-based journalist assigned to Naval Media Center, FSD Norfolk.



FC2 (SW) Scott Johnson talks candidates through the intricacies of the fire control system.



BM2 James Owens studies the unfamiliar world of gas turbine engines en route to his warfare pin.



EW2 (SW) Steven Draper (far right) conducts an impromptu class on electronic warfare.

The Sinking of the Merrimac

by LCDR John Kirby



Early on the morning of June 3, 1898, a U.S. Navy lieutenant and seven brave Sailors drove a broken-down, unarmed collier (coaling ship) into a heavily defended Cuban harbor — and tried to sink her. If all went well, the little ship would go down directly athwart the channel entrance, permanently bottling up the Spanish fleet anchored inside. Some called it a suicide mission. But the risk was worth taking... if everything went according to plan.

Nothing that morning went according to plan.

Enter the *Merrimac*

In mid-May of 1898, not long after Dewey's victory in Manila Bay, the Spanish government sent Admiral Pascual Cervera and the Home fleet to the Caribbean with orders to defend Puerto Rico. Instead, Cervera skillfully eluded elements of the U.S. Navy's North Atlantic Squadron and took refuge in Santiago harbor on Cuba's southeast coast. Tucked away like that, Cervera's fleet was harmless enough. But if it escaped, there was no telling how much damage it could do.



Lt. Richmond Pearson Hobson

Arriving off Santiago on June 1st, Admiral William T. Sampson, commander of the North Atlantic Squadron, decided on a swift course of action. Since advancing into the harbor to pick a fight was senseless — the channel was extremely narrow, heavily mined and protected on both sides by formidable shore batteries — Sampson opted to sink a ship athwart the channel entrance, blocking Cervera's escape. If he couldn't get his fleet into the harbor, maybe he could prevent theirs from getting out.

No other ship in Sampson's fleet was more ideal for this mission than *Merrimac.* Displacing more than 3,000 tons and measuring 333 feet in length, she was large enough to completely block the channel (which varied from 300 to 450 feet across), yet small enough to turn inside it. And she'd been nothing but trouble since reporting for duty just a couple of months before. The *Merrimac* broke down so often, in fact, that it was cause for celebration if she steamed for just a few hours without an engine or steering gear problem. At times, noted one observer, the "full engineer force of the [cruiser] *Brooklyn* was sent aboard her to get her running again." Though her crew was sharp, the ship itself was a detriment.

Alone by moonlight

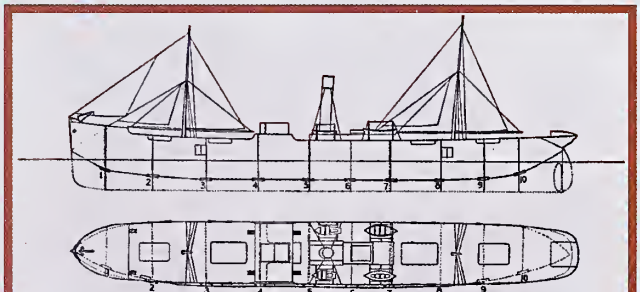
Having settled on the *Merrimac* for the blocking ship, Sampson summoned Lieutenant Richmond Pearson Hobson to his cabin and told the 27-year old naval constructor to lead the effort. After some deliberation, Hobson settled on fairly simple plan which called for the Merrimac to sail in alone by moonlight on a flood tide. Manning the bridge, Hobson would communicate with his crew by pulling on cords tied to their wrists. One pull meant "Standby;" three pulls was the signal for action.

At just the right moment, the forward anchor would be let go, the sea valves below decks opened, the helm thrown to port and a stern anchor released. Once the ship lay across the channel and all his men were safely in a lifeboat, Hobson himself would throw a switch, igniting 10 torpedoes [explosive canisters] strapped to her port side beneath the waterline. The collier was expected to sink within one minute and 15 seconds. "Nothing on this side of New York City will be able to raise her after that," he boasted. That was the plan.

Cheering volunteers

Because of the danger involved, Admiral Sampson wanted only volunteers for the mission. He had no trouble finding them. "Cheering crews from every ship stepped forward at the summons for extra hazardous duty," wrote Associated Press reporter Henry Beach. "About 300 men from The *New York*, 180 from the *Iowa* — and a like proportion from the other vessels — enthusiastically volunteered for the dangerous assignment." It was even reported that *New York's* bandmaster and several of his musicians begged to go, just so they could play "The Star-Spangled Banner" as the ship went down.

Wanting to risk as few lives as possible, Hobson limited the number of men to seven. He personally selected Gunner's Mate First Class George Charette, whom he knew from his midshipman days. The others were chosen by their respective ships. Coxswain J. C. Murphy represented the *Iowa* after winning a coin toss; Chief Master at Arms Daniel Montague was the unanimous choice of the *New York's* wardroom; Coxswain Randolph Clausen was nominated from the *Texas;* and Coxswain Osborn Warren Deignan, Machinist Mate First Class George Phillips and Water Tender Francis Kelly were kept on from the *Merrimac's* crew.



PLAN AND ELEVATION OF THE "MERRIMAC," SHOWING ARRANGEMENT OF THE TORPEDOES, ON THE PORT SIDE.
Before entering the channel Nos. 7, 9, and 10 were reported useless. The ones actually exploded were Nos. 1 and 5. The batteries of the others were shattered by the Spanish fire.

Bad luck and little time

Lieutenant Hobson now turned his full attention to making the final preparations, but time and luck were running short. It was now mid-day on the 1st of June. In order to enter the harbor in complete darkness with a flood tide, the *Merrimac* would have to get underway early on the morning of the 2nd, a little more than 12 hours away. To make matters worse, the

coal heavers who were ordered to empty all the coal from the ship's port bunkers misunderstood their orders and merely shifted it to the starboard side, giving her an ungainly list. Then, the belt lines fastening the torpedoes to the ship's hull became snarled; the stern anchor chain became so badly tangled that a makeshift one had to be fabricated, and the flagship informed Hobson that nowhere amongst the fleet could they find a hand generator capable of remotely detonating the torpedoes. Hurriedly, a few storage batteries and some wire were rounded up.

They were at last ready to go, but the mission was still cursed. Just after midnight on the 2nd, four stowaways were found onboard, and then, shortly after departure, the lifeboat that *Merrimac* towed behind her capsized and sunk. Finally, Sampson recalled the ship. It was just getting too close to sunrise for the mission to proceed. They would try again the next day.



Merrimac aground and under fire off Estrella Point.

Seconds of fate

Late into the evening, Hobson reviewed the plan with his men for what seemed like the millionth time. Aside from the lack of a hand generator, everything else was okay.

At 3 a.m. on the 3rd, the collier slipped away quietly from the fleet and headed for the harbor. "It was that calm hour before dawn," wrote a *Boston Herald* reporter who watched the scene, "when life is at its lowest ebb, and the tide runs out, carrying the lives of mortals with it. Slowly, the seconds of fate ticked on as 3,000 men aboard the fleet strained eyes and strove to pierce the deep veil of night."

They didn't have to wait long. When she was still about 500 yards from the entrance, an enemy picket boat let loose on the *Merrimac*, firing three rounds at close range. Then the shore batteries opened up, raining shells down upon her. At first it seemed that most of the shots had missed, but when Hobson ordered the final course change the helm refused to answer. The *Merrimac's* steering gear was gone — shot clean away. Their only hope now was to let the ship's momentum carry her up the channel, use the anchors to swing her into position and fire all the torpedoes at once. Hobson passed the word.

"Lads, they are helping us!"

Slowly and still under heavy fire, the *Merrimac* crawled along. When at last she reached position, Hobson gave three steady pulls to the cords around his men's wrists. Instantly, the order was met by the wonderful sound of the forward anchor dropping and the blast of the first torpedo firing. *Finally, something was going right.* But of the nine remaining torpedoes only one exploded, and then Chief Montague came forward to report that the stern anchor had been shot away with the steering gear.

Still ... if the bow anchor could just hold, they might yet succeed. It didn't. Straining under the great weight of the now sinking ship, the chain parted, casting *Merrimac* adrift.

Suddenly, the night shook with a thunderous roar. "A blasting shock, a lift, a pull, a series of vibrations, and a mine exploded directly beneath us," recalled Hobson. "My heart leaped with exultation. 'Lads, they are helping us!'" he shouted. But the explosion did minimal damage and only helped drive the *Merrimac* aground on the east side of the channel. Hobson knew his mission had failed. "The work was done, and the rest was only a question of time. We could now turn our attention toward the course of action to be taken next."

"Like hell with the lid off"

That course of action was to survive. As the *Merrimac* slowly began to sink, the Spanish fire intensified, precluding any

Hobson's Crew


Randolph Clausen


George Charette


J.E. Murphy


Daniel Montague


Osborn Warren Deignan


Francis Kelly


George F. Phillips

movement above decks. Broken glass, wood splinters, and shrapnel flew wildly about, accompanied by the barks and booms of howitzers, pistols, rifles and shore guns. To Captain Robley Evans of the *Iowa,* it looked from afar "like hell with the lid off." Lying prone on the deck, helpless and motionless, the men fought off thoughts of death. "The deck vibrated heavily, and we felt the full effect," remembered Hobson. "At each instant it seemed that certainly the next would bring a projectile among us. The impulse surged strong to get away from a place where remaining seemed death." But they all knew that swimming for it was suicide. With the still flooding tide and their white life preservers, they'd be sitting ducks for Spanish sharpshooters. There was nothing left to do but stay with the crippled ship.

All of a sudden, *Merrimac* lurched forward and heeled to port. This was it. Two Spanish warships quickly approached and fired four torpedoes at her, but by then it didn't matter. She was going down fast now. "The vessel lowered her head like a faithful animal, proudly aware of its sacrifice, bowed below the surface, and plunged forward," Hobson noted. As the men tumbled overboard with a great rush of water, her stern rose up, stood shuddering for a moment, and then disappeared beneath the waves. *Merrimac* was dead.

Prisoners in Spanish hands

Coughing up seawater, the men gathered beneath a catamaran raft that was still tethered on one side to the sunken ship. Amazingly, none were seriously hurt. After taking a quick head count, Hobson ordered them all to stay huddled together and quiet, for a Spanish destroyer was still in the area. He felt their only chance for survival lay in being picked up after daylight by a reconnoitering boat from ashore.

"The vessel lowered her head like a faithful animal, proudly aware of its sacrifice, bowed below the surface, and plunged forward." — *Lt. Richmond Pearson Hobson*

Just after sunrise a steam launch approached the wreck, probing for signs of life. This was their chance. The men were cold and tired — Hobson knew they couldn't hold out much longer. Bravely, he splashed away from the raft and hailed the boat. At once a squad of riflemen filed out on the boat's bow and took aim at him. "But the volley did not follow," he recalled. "The aim must have been for caution only, and it was apparent that there must have been an officer onboard in control." Indeed there was — it was Admiral Cervera himself. A rescue ensued. In a strange twist of fate, Hobson and his seven volunteers were hoisted to safety by the very admiral whose fleet they were trying to capture. Now they were prisoners in Spanish hands.

Successful failure

Though *Merrimac's* mission was deemed a failure, it had far-reaching effects. On July 3rd, exactly one month after the sinking, Cervera's fleet was annihilated by ships of the North Atlantic Squadron as it tried to escape from Santiago harbor. Within a week of that battle, the city of Santiago itself surrendered to American ground forces, leaving the United States in undisputed control of Caribbean waters and paving the way for an invasion of Puerto Rico. Spain sued for peace not long afterward. Had Hobson succeeded in bottling up the Spanish fleet, those very ships could have helped in the defense of Santiago, prolonging the war and providing Spain with a better bargaining position.

On July 6, 1898, Lieutenant Hobson and his crew were released from captivity, returning to a triumphant welcome in America. For their bravery, all eight were awarded the Congressional Medal of Honor.

Kirby is the head of still media, Naval Media Center, Washington, D.C. Images courtesy of Naval Institute Press.

Chief has the con

World-renowned author and naval enthusiast Tom Clancy once said that he felt the Navy was the one branch of the military that could operate effectively without its officer corps. He was speaking hypothetically. The comment was intended to be the strongest possible endorsement for what he felt to be an exceptional enlisted community. He never thought the Navy would take it so literally. But, during their recent Mediterranean deployment, Sailors aboard USS Ashland (LSD 48) did just that.

By JO2 Shane Barker

While getting underway following a port visit to Naples, Italy, *Ashland*'s sea and anchor detail was manned by a crew made up entirely of enlisted Sailors. The evolution set in motion a push among the ship's enlisted crew members to train and qualify to stand watches traditionally manned by officers.

The move was applauded by the ship's commanding officer, CDR Antony O. Heimer. "We have some exceptional talent within the enlisted ranks aboard *Ashland*. I was confident in their ability to get the ship underway safely and professionally. They did it, and they did it with style."

The motivating force behind the all-enlisted detail was Chief Signalman (SW) Steven G. Lominac of Virginia Beach, Va. Having qualified as officer-of-the-deck (OOD) underway while serving aboard USS *George Washington* (CVN 73), Lominac was encouraged to qualify as an OOD aboard *Ashland*. With the experience he gained aboard *GW* and during his follow-on tour as a tug captain, Lominac was confident he could qualify.

"Driving tugs teaches you everything you need to know about handling, docking and undocking ships," he said. "I learned from the best harbor pilots in the world at the Norfolk Naval Base."

To help his signalmen diversify their professional expertise, Lominac developed a new personal qualification standard (PQS) for the junior officer-of-the-dexck watch so enlisted Sailors could have the

qualification added to their service record. Following Lominac's example, crew members began to pursue qualifications of their own. Signalman First Class (SW) Michael W.T. Wilson, *Ashland's* 1997 Sailor of the Year, was the first to step forward.

The Rochester, N.Y., native worked through the new PQS using his knowledge as an enlisted surface warfare specialist, but he admitted, "Even that didn't cover everything. There were a lot of things that I had either learned and forgotten or had just never learned before. By doing that PQS, I learned a lot more about how this ship has to be handled. It's not just as easy as giving an order or the helmsman steering the ship left and right. It was a good professional growth tool for me."

While standing watch as the ship's navigation supervisor, Chief Quartermaster (SW) Ronald L. Blackburn learned there is more to driving a ship than just plotting a straight course.

"Generally, I'm just worried about one aspect of navigation," explained the Statesville, N.C., native. "This time, I had to worry about shipping and a lot of other things. It gives you a different perspective."

Blackburn added that by opening the qualifications and watchstanding duties to more junior Sailors, job performance and chances for advancement improve.

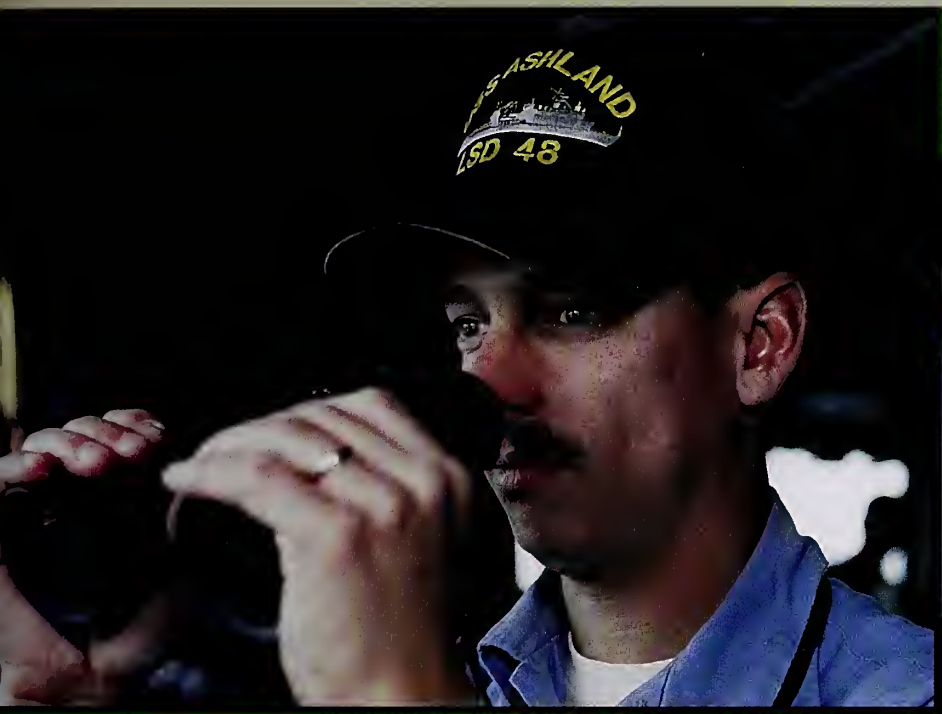
"We want to keep moving our junior Sailors up, up, up. That way, they never get stagnant. The more challenges you give them, the more willing they are to accept them. Sailors are happiest when you challenge them."

"Because the command allowed the crew to move up a notch and assume some of these watches, people are walking around with their heads lifted high and they are taking even more pride in their work," added Chief Operations Specialist (SW) Robert Best of New York, N.Y.

The challenge to this initiative, according to CDR Heimer, is to qualify enlisted watchstanders, but not at the expense of his junior officers who are required to qualify at their watchstations. But, if the initiative is a success, the reward could be a larger number of qualified watchstanders, which means watchstanders will be well-rested and the crew more diversified. Heimer has no intention of slowing down now, not when the benefits of the program are so obvious.

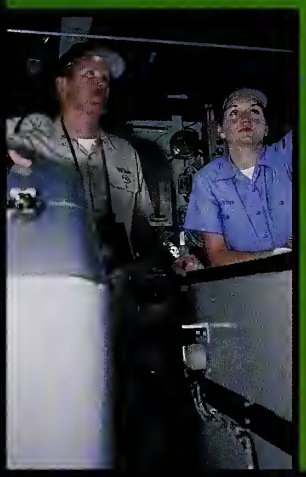
"We've definitely raised the bar," said Heimer. "It's worked its way down where we've had second and third class petty officers jump in to qualify at these watchstations. I want to continue this because it gives everyone a chance to stand these different watches and, I think, gives the crew a sense of pride that they can run this ship themselves."

Barker is assigned to the public affairs office aboard USS Ashland *(LSD 48).*



Photos by JO1 Ron Schafer

SM1 (SW) Michael Wilson of Rochester, N.Y., stands watch as the conning officer on the bridge of USS *Ashland* (LSD 48). Wilson is *Ashland's* 1997 Sailor of the Year.



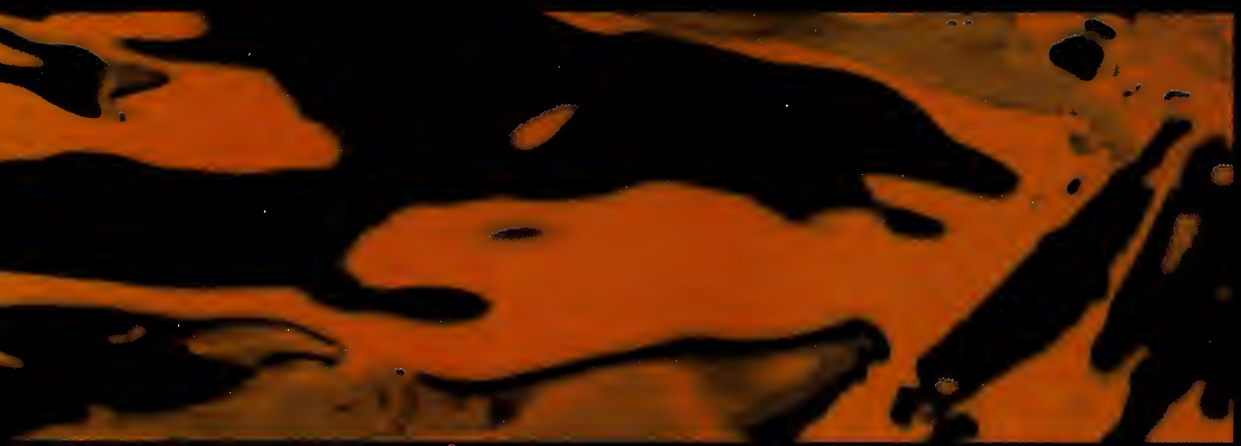
SMC (SW) Steven G. Lominac of Virginia Beach, Va., stands watch as the officer-of-the-deck while QM3 Melissa A. Webster of Bedford, Ind., acts as bearing recorder on the USS *Ashland* (LSD 48).



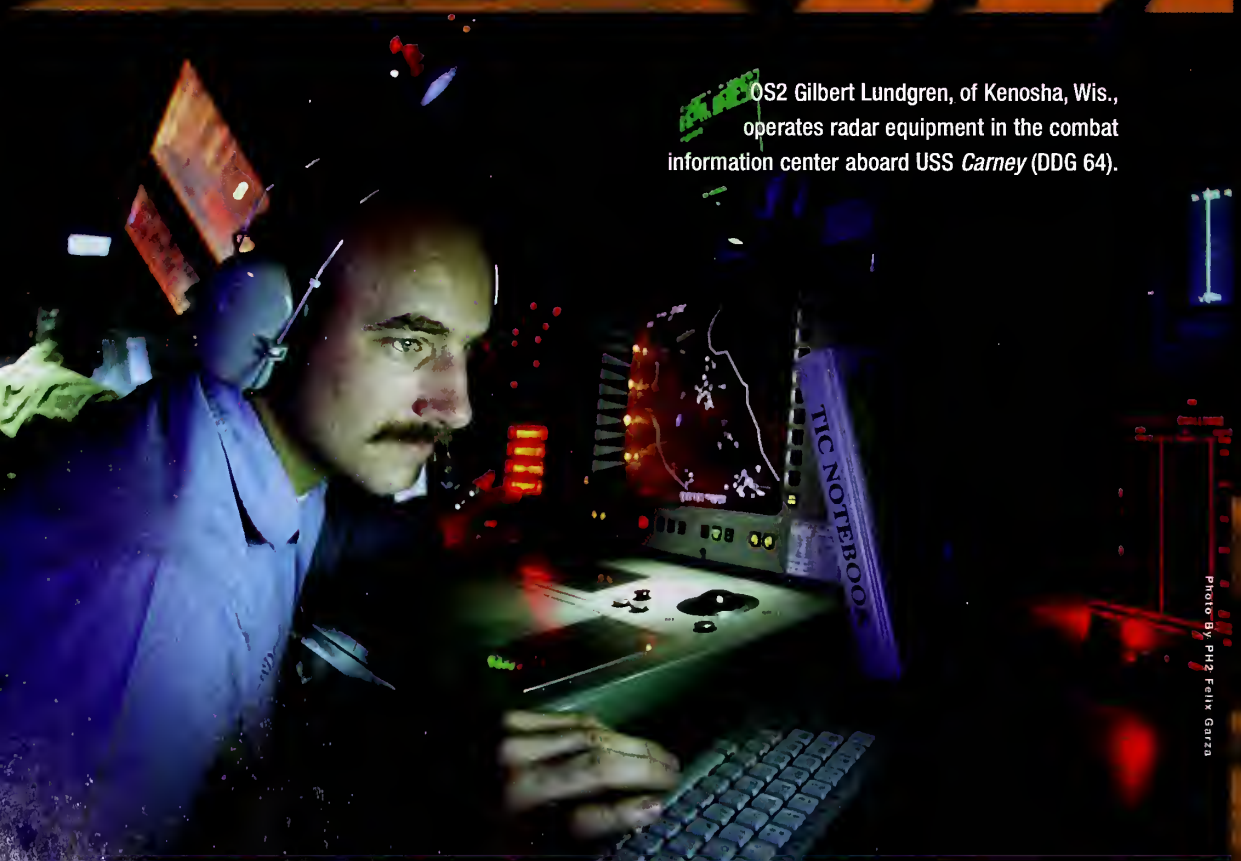
QMC (SW) Ronald L. Blackburn of Statesville, N.C., stands watch as the ship's navigator while QM3 Melissa A. Webster acts while bearing recorder.

Eye on the Fleet

EYE ON THE FLEET is a monthly photo feature sponsored by Navy News Photo Division. We are looking for HIGH IMPACT photography from SAILORS in the fleet, to showcase the America



GM3 Walter Vanderhorst, of Queens, N.Y., loads projectiles into the 5-inch gun aboard the *Spruance*-class destroyer USS *John Young* (DD 973).



OS2 Gilbert Lundgren, of Kenosha, Wis., operates radar equipment in the combat information center aboard USS *Carney* (DDG 64).

Photo By PH2 Felix Garza

Photo By PH2 Felix Garza

he Chief of Information,

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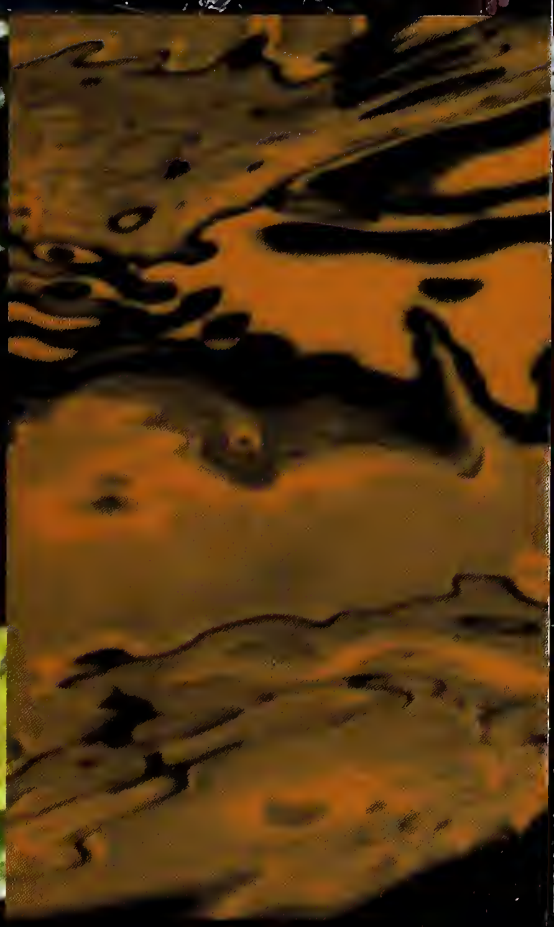
ailor in ACTION.



Photo By PH2 Joseph Gunsallus III

DC2 Danna Sewell of Richmond, Va., helps a member of the repair locker don his "oxygen breathing apparatus" during a general quarters drill aboard USS *La Salle* (AGF 3).



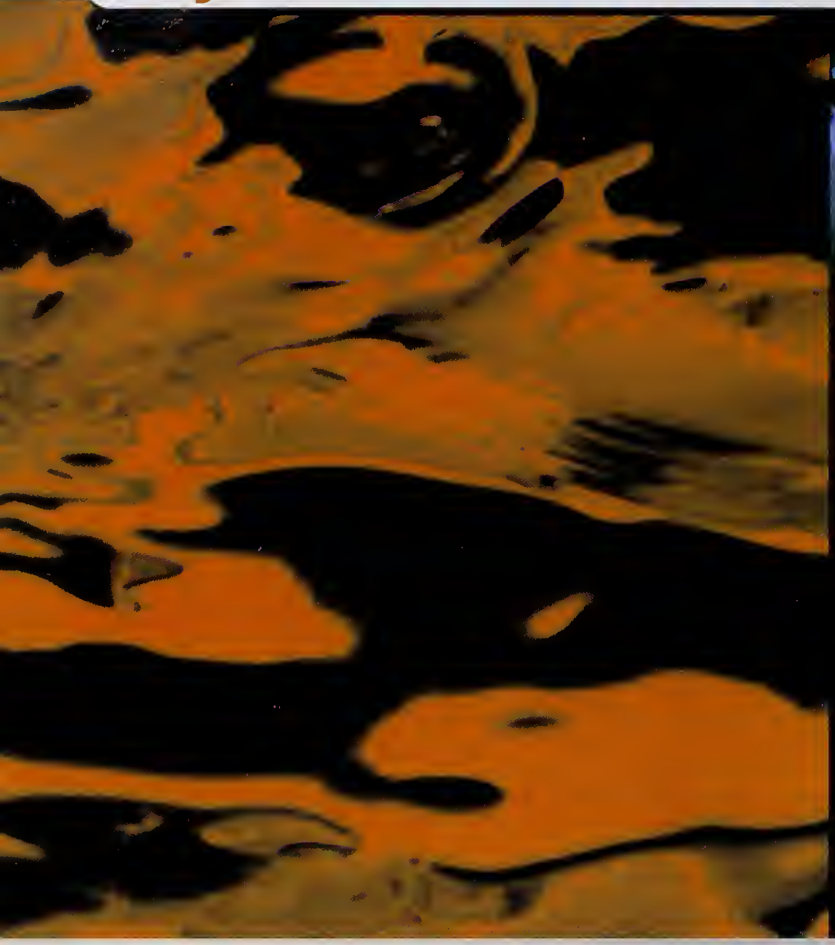




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Eye on the Fleet





GM3 John Wiederhold tests a Vertical Launch System (VLS) panel aboard USS *John S. McCain* (DDG 56).

CWO Melvin White, of Virginia Beach, Va., works out in his off time aboard USS *Normandy* (CG 60).

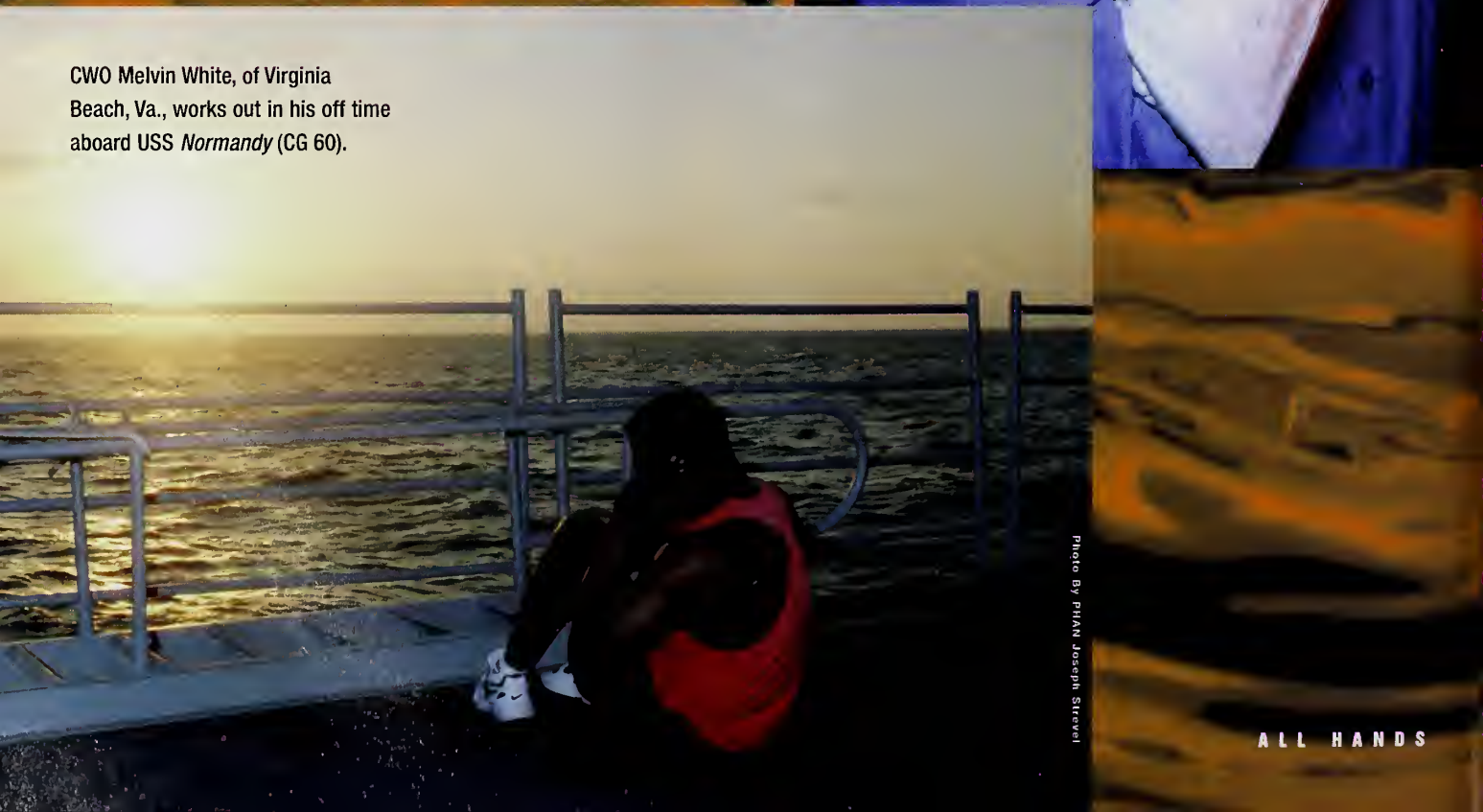


Photo By PHAN Joseph Strevel



U.S. Navy guided-missile cruiser USS *Lake Champlain* (CG 57) conducts Precision Alignment Correction Fire (PACFIRE) exercises off the port bow with the 5-inch, MK 45 gun.

Photo By PH3 Clinton C. Beaird

Photo By PH2 Felix Garza

AN Brian Nestby, from Dubuque, Iowa, stows a firefighting hose after a firedrill on the flight deck of USS *George Washington* (CVN 73) as USS *Normandy* (CG 60) steams alongside.

Photo By PH3 Sam Dallal

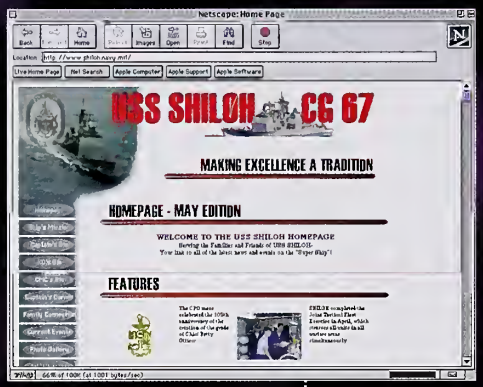




cybersailor@mediacen.navy.mil

Cyber Sailor

SHIPS



USS *Shiloh* website



USS *McFaul* website



USS *John S. McCain* website

It seems like every site has an award nowadays. You've seen 'em. Cruising the net, you can always find those little logos proclaiming that a particular site has just been named among the top 100 in... whatever! Kid's games, schools, job searches, household pets, web-based merchandising... you name it. I don't pretend to know what it all means, but, hey, a page featuring a classy logo and a statement saying it is listed in "Frank's Top 100 Horticultural Sites" lends a bit of credibility. Don't you think?

Well, I've decided to get into the act myself. Announcing the all-new and, I'm sure, much sought-after "CyberSailor Site of Excellence" award (that's the coveted CSSOE, pronounced kes-o-e, for all of you keeping score at home).

My honor will designate those sites which have, through innovative design and thorough content, succeeded in meeting my standards of unrelenting excellence. That is to say, my logo proclaims to all who care, "I LIKE IT!"

Okay, so much for the grand announcement, let's get down to Round 1. This month, we'll take a look at the offerings of the Navy's cruisers, destroyers and frigates. For this issue, I reviewed 130 sites — that's all I could find. (That's a hint, webmasters, if your ship has a web site, send me the URL at the address at the top of the page.)

Can I be honest? I immediately eliminated all ship web sites that haven't been updated for the past six to 12 months. Why? Well, because these are MY awards, and because this is the Internet after all — if you can't keep it updated, why bother?

Now, please be forwarned, I've incorporated some personal likes and dislikes into my selections, but as I said before, these are MY awards. For example, I LIKE sites with interesting information and vivid photographs. I DISLIKE sites with pictures of the CO, XO and that stern-faced command master chief greeting me on the opening page. I apologize to these important folks and I realize they are vital to the web site's existence, but they really should be accessed via links — don't paste 'em on the homepage.



Sorry, but glitzy animated graphics don't guarantee selection, unless they are used sparingly and add to the overall design (without making me wait too long).

A total of eight sites make the first cut. Of these, seven stood out simply because they offer a special page just for Sailors preparing to report aboard. These sites are USS *Russell* (DDG 59) at **http://www.russell.navy.mil**; USS *Ramage* (DDG 61) at **http://www.spear.navy.mil/ships/ddg61**; USS *Anzio* (CG 68) at **http://www.spear.navy.mil/ships/cg68**; USS *Caron* (DD 970) at **http://www.spear.navy.mil/ships/dd970**; USS *Thomas S. Gates* (CG 51) at **http://www.spear.navy.mil/ships/cg51/index.html**; USS *McFaul* (DDG 74) at **http:// www.navy.mil/homepages/mcfaul**; and USS *John S. McCain* (DDG 56) at **http://www.mccain.navy.mil**. A bonus site, USS *Shiloh* (CG 67) **(http://www.shiloh.navy.mil)** was added because of the site's overall clean, neat and interesting design.

Every one of the 130 sites I visited offered information about the ship, her capabilities and general information on her history. But, do you ever ask yourself what other reasons folks may have for visiting a ship's website? What about families and friends who want to find out what the Sailors onboard are up to? And how about those people who want to learn what it's like to work and live onboard ship? I talk to webmasters everyday, specifically those at the larger shore stations, and I've found that Sailors are beginning to use the web as a way to learn about the duty stations their detailers are talking about. Boy, it sure would be nice to be able to find out about a ship, its crew and its homeport all in one place.

So there you have it, the first round of the CSSOEs. In the next few issues, I'll wander the net in search of carriers, amphibs, auxiliaries and minesweepers. If your ship has a site you think is worth stopping by, e-mail me and let me know the URL.



Where are You?

Shipboard webmasters, for the most part, are volunteers who have developed their HTML-ese during their off-duty time. Knowing what gets priority for funding aboard ship, I would also assume that many of them are using their own machines and software.

I salute all you Sailors who have taken on the job of putting your command's best foot forward. I also have a favor to ask.

I'd like to keep the readers of *All Hands* informed of Navy web sites that keep Sailors and their families up-to-date on the latest technology and happenings around the fleet. But I can't do it alone and search engines do have their limitations.

If you're maintaining a site, or know of one, that is designed to tell your command's story, tell me about it! I'd sure like to shed some light on those diamonds in the rough.

Shipmates



Hull Technician 2nd Class (SW) **Joe Towles**
was selected as USS *Emory S. Land's* (AS 39) 1997 Junior Sailor of the Year. As the ship's repair parts petty officer, the Gladstone, Va., native keeps track of more than $10,000 in repair parts needed for the ship and her submarines. Towles is also the assistant divisional career counselor and the fire party on-scene leader for his duty section.



Mary Jo Cervantes
was selected as the 1997 Civilian of the Year for Naval Air Reserve Station Point Mugu, Calif. While serving as team leader for the command's security process action team. She provided administrative rate training on security-related matters and helped command personnel study for advancement examinations.



Gas Turbine System Technician (Mechanical) 1st Class (SW) **Wayne H. Gale**
from Fleet Training Center (FTC) Mayport, Fla., was selected for the Enlisted Commissioning Program. Additionally, he was selected as the FTC Instructor of the Year for 1997, Instructor of the Quarter and Sailor of the Quarter (for the 4th quarter of 1997).



Seaman (SW) **Clorinda Ortega**
was selected as USS *Simon Lake's* (AS 33) 1997 Seaman of the Year. Ortega, a native of San Mateo, N.M., is the deck department's repair parts petty officer and works as a "sponsor" aiding newly-reported seamen in adjusting to life onboard ship.

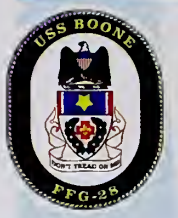


Engineman 1st Class (SW) **Tearance W. Bauer**
was recently named USS *Shamal's* (PC 13) 1997 Sailor of the Year. The Merced, Calif., native was recognized for his outstanding leadership, professionalism and motivation as a main propulsion assistant, department leading petty officer, chief master at arms and acting damage control assistant.



Radioman First Class (SW) **Erica Dobbs**
was named Allied Command Atlantic's Military Member of the Year for 1997. The Hartwell, Ga., native is the Technical Control Facilities leading petty officer, database manager and circuit supervisor at NATO's North American headquarters, Norfolk, Va.

Break Away!



Motto: Don't Tread On Me
Breakaway Song: Born To Be Wil
Homeport: Mayport



Motto: Honor and Glory
Breakaway Song: Eye of the Tig
Homeport: San Diego



Motto:
Intrepide Impelle (Fearlessly Forward)
Breakaway Song:
Along the Watchtower
Homeport: San Diego



Motto: First Among the Finest
Breakaway Song:
Slipping into Darkness
Homeport: Everett



Motto: Successum Merere Conemur (Endevor to Succeed)
Breakaway Song: Bad to the Bon
Homeport: Yokosuka



Motto: Never Give In
Breakaway Song: Johnny B. Goo
Homeport: San Diego



Motto: Job Well Done
Breakaway Song:
Hawaii Five-O Theme
Homeport: Pearl Harbor



Motto: Making Excellence a Tradition
Breakaway Song:
Proud to be an American
Homeport: San Diego

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ALL HANDS
U.S. Navy
July 1998

ALL HANDS

Magazine of the U.S. Navy

August 1998



Tech WAR

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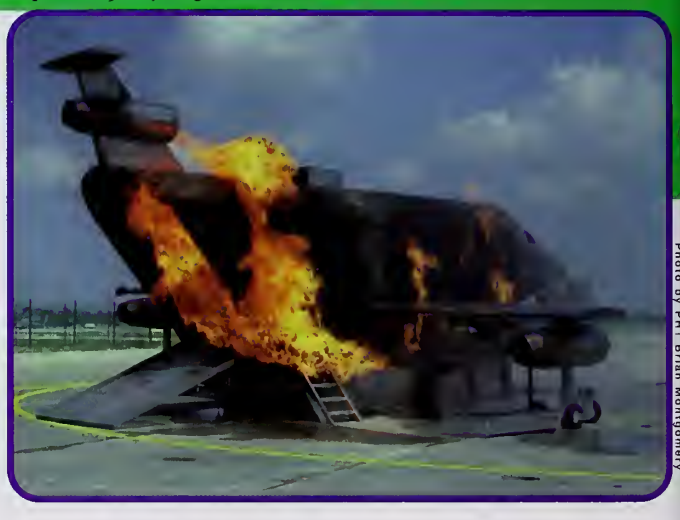


Photo by PH1 Brian Montgomery

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ALL HANDS

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The Honorable John H. Dalton

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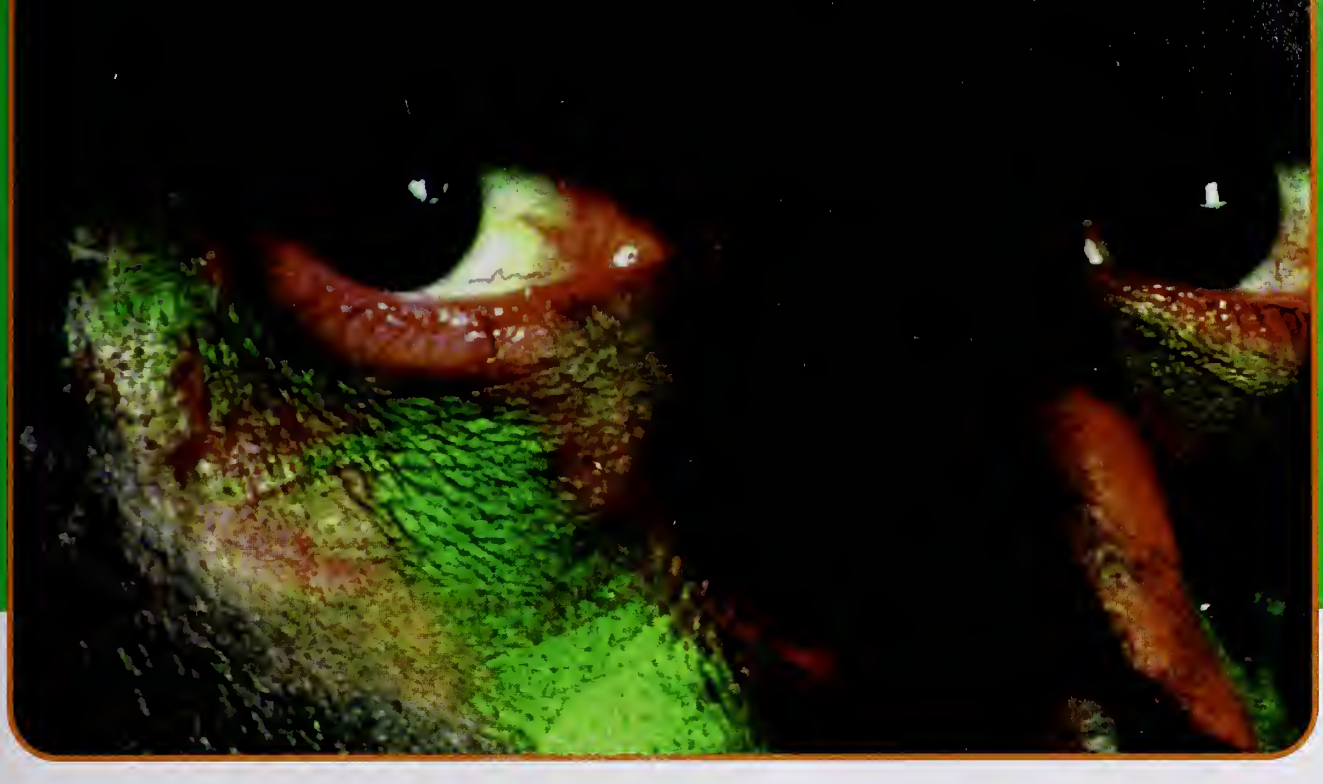


Photo by JO1 Robert Benson

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30 Instantaneous Information
Ships throughout the fleet are now being fitted with computers to make IT-21 – a program designed to link all afloat and ashore commands to a single LAN that can exchange classified and unclassified, tactical and non-tactical, real-time information – a reality.

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Check us out Online at:
www.chinfo.navy.mil/navpalib/allhands/ah-top.html

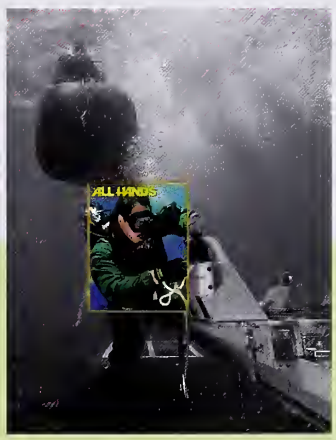
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On the Cover
With a growing arsenal of new weaponry – including digital cameras, laser pointers, mouth mikes, infrared scopes, laptop computers and portable satellite communications – Navy SEALs are boldly attacking the 21st century with new vision and enhanced capabilities.

Photo by JO1 Robert Benson



On the Back Cover
Members of SEAL Delivery Vehicle Team TWO conduct training operations in the Caribbean.

Photo by PH1(DV) Andy McKaskle

THROUGH THE LOOKING GLASS





USS *John F. Kennedy* (CV 67) passes under the Verrazano-Narrows Bridge on her way to New York City for Fleet Week '98. Photos by PHAN Jennifer M. Beck and PH2 Scott Moak (inset).



FLYING FISH





USS *Columbus* (SSN 762), homeported at Naval Station Pearl Harbor, conducts an emergency surface training exercise 35 miles off the coast of Oahu. Photo by PH2 David C. Duncan.

Letters

Year 2000 vs. The Millennium

The March issue of *All Hands* contained an article entitled "Y2K," regarding the concerns over computers that can't process the year 2000 properly.

It should be noted that throughout the article, the author made references to the millennium. Although he never expressly said so, the references did insinuate that the new millennium will start Jan. 1, 2000, which is what many Americans do believe. That's not true.

The third millennium A.D. will begin Jan. 1, 2001. The Gregorian calendar had no year 0, it went straight from 1 B.C. to 1 A.D. As such, the first millennium A.D. started in the year 1 A.D. The second (and current) millennium started in the year 1001 A.D., exactly 1000 years after the start of the millennium before it. Therefore, the next millennium will begin in 2001, 1000 years after the start of the second (and current) millennium.

While this may seem like a small point, it is a common misconception that many people have. I believe it's the job of the media – including publications like *All Hands* – to ensure that fallacies like this one are not perpetuated, even inadvertently.

David W. Crenshaw
Virginia Beach, Va.



U.S. Navy photo

USS *Carter Hall* (LSD 50)

Environmental *Hall* of Fame

As an environmental enthusiast and a proponent for the Navy's environmental preservation protection programs, I read your [April] issue of *All Hands* with bittersweet emotions. I was thoroughly impressed with your magazine's 47-page layout, which encompassed everything from marine life to ocean demographics. Clearly, a great deal of research, time, effort, planning and creativity had been funneled into this edition of the "magazine of the U.S. Navy."

I found your Earth Day insert to be lacking in the scope of research that you had so obviously devoted to the rest of the magazine. Highlighted in the centerfold is an unidentifiable Aegis-class cruiser, the example of the platform whose goal it is to protect the oceans, the Navy's "most prized resource for training and readiness."

USS *Carter Hall* (LSD 50) is the CNO's and SECNAV's Environmental Award recipient for FY97. As commanding officer, I make it my personal responsibility to ensure that every facet of every shipboard program which has potential environmental repercussions is taken seriously and groomed meticulously. Environmental awareness is a main focus in *Carter Hall* and we have been recognized for our attention to detail in this area of concern. I was chagrined to see the omission of those U.S. naval commands recognized for their environmental excellence; a list that was promulgated by SECNAV in mid-March.

I would hope that, in the future, commands like USS *Carter Hall* will be recognized as those responsible for maintaining the standard of excellence for the Navy. These commands deserve tangible recognition for their hard work and dedication – work and dedication that starts at the deckplate level.

S.V. DeGeus
Commanding Officer
USS *Carter Hall* (LSD 50)

Tell us something we don't know.

Send your comments to: *All Hands*, Naval Media Center, Bldg. 168, NAVSTA Anacostia (ATTN: Editor), 2701 S. Capitol St. S.W., Washington, D.C. 20373-5819

or e-mail: allhands@mediacen.navy.mil



CTT1(SS) William Kepner receives a video e-mail from his 5-year-old daughter, Carissa. It's only fair since he sends her one almost every evening.

Photo by JOC(SW) Jim DeAngio

Generation Next

Video e-mail is here! And it is creating quite a stir among the Sailors and Marines deployed to the Western Pacific with USS *Tarawa's* (LHA 1) Amphibious Ready Group.

"We have sent nearly 400 video e-mails since installation was completed six weeks ago," said Religious Program Specialist 1st Class Michael Lines, who supervises the program in the ship's library. "We get nothing but positive feedback. Once they send one, they think it's great. It's a real morale booster!"

Test platforms, *Tarawa*, USS *Mount Vernon* (LSD 39) and USS *Denver* (LPD 9) are taking communications into the 21st century. By adding a small camera and some additional software to a desktop personal computer, Sailors can now send shorts videos –

continued on page 8

Brand New BEQs

In seeking new ways to improve its junior Sailors' quality of life, the Navy has taken a huge step in the right direction.

It is currently building new barracks and renovating existing buildings in an effort to provide private rooms for all its junior enlisted Sailors. The program, called the *1+1 Standard*, is seeking to provide everyone in pay grades E-1 to E-4 with a shared, two-room suite, complete with private bedrooms and kitchenettes.

Naval Technical Training Center Corry Station in Pensacola, Fla., a joint-service training base with a large contingent of students and staff from the Navy and other services, opened the first *1+1* renovated barracks. The Navy is currently building *1+1* barracks in Port Hueneme, Calif., Annapolis, Md., Corpus Christi, Texas, Portsmouth and Williamsburg, Va., Guam and Sigonella, Sicily.

Before their facelift, the Corry Station BEQs housed residents in "rack and stack" with four-to-a room berthing – and sometimes more.

"The buildings have taken on a new personality," said Theresa Withee, the Corry Station bachelor housing director. "They have new sloping metal-seam roofs and individual heating and air conditioning units, and the residents especially enjoy the kitchen because it makes the shared living quarters more like home."

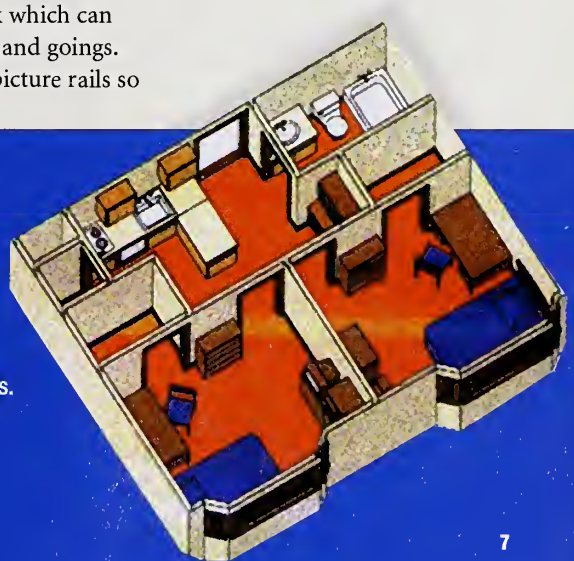
"I certainly didn't think the new barracks would be anything like this," said Seaman Michael Richardson, assigned to the Ceremonial Guard, Naval Station Washington, D.C., who lives in a modified version of the *1+1* plan. "This exceeded my expectations."

According to LCDR Jennifer Flather, public affairs officer for the Washington Annex, "We wanted to provide a campus-like atmosphere in addition to the state-of-the-art furniture and fixtures."

The modified version offers a microwave oven, matching furniture and accessories, pullout computer desks, a washer and dryer and a small shared living-room area. There's also an electro-magnetic key lock which can monitor comings and goings. "We even put in picture rails so these guys won't need to drill nails in our walls," Flather said.

"I think on the whole this is great," said SN Victor Mace, also assigned to the Ceremonial Guard in Washington. "It offers us a lot of privacy – kind of like you're at home. This is better than any barracks I've ever seen."

Story by Patricia Oladeinde, staff writer for All Hands.



Units feature shared kitchen and bath areas (top) and private sleeping rooms.

continued from page 7

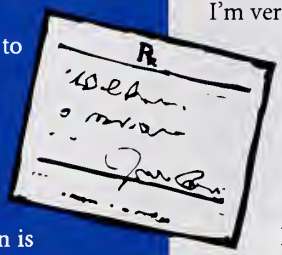


Respiratory Research

Navy research has perhaps discovered another tool to combat acute respiratory diseases – azithromycin. The Naval Health Research Center (NHRC), Navy Environmental and Preventive Medicine (Unit 5) and Naval Hospital Camp Pendleton, Calif., are currently conducting a study of the drug's effects on more than 1,000 Marine trainees at the Infantry Training School at Camp Pendleton.

CAPT (Dr.) Gregory C. Gray, a researcher at NHRC, said the antibiotic, which has been approved for use by the Federal Drug Administration, may be useful in combating the outbreak of streptococcal infections among recruits and other military populations.

"Because it prevents more types of infections," explained Gray, "it may be a better choice to combat bacterial respiratory epidemics of unknown cause."



The benefit of using azithromycin is that it protects against more bacterial pathogens, which is necessary in large, high-risk populations. For Sailors and Marines, the new regimen is much more attractive because azithromycin is taken orally rather than by injection.

Story by Kimberly Allen Rawlings, public affairs office, Bureau of Medicine and Surgery.

with near real-time audio – to the folks back home or to anyone, anywhere in the world. The video is sent as an attachment to a traditional e-mail, much like a picture or .WAV (sound) file. Once received, it can be downloaded and played, deleted or saved for future viewing.

"It is a fantastic way to keep in touch with your family," beamed Cryptologic Technician (Technical/Submarine) 1st Class William Kepner, of Munich, Germany. "I tell everybody I work with to try it. I'm there almost every night. I use it to keep in touch with my daughter."

And his daughter uses it to keep in touch with him.

Using the newly-installed system at headquarters, Commander, Amphibious Group 3, 5-year-old Carissa can send videos to daddy on board *Tarawa.*

"She loves the videos," said Kepner's wife Susan via e-mail. "Carissa loves being able to see, hear and talk to her dad. She plays the videos over and over and answers him if he asks a question. I'm very thankful for this technology. He is on the other side of the world, but we can see and hear him, and it makes him seem closer."

What's next, e-mail care packages?

"I think we'll soon be able to telephone home through the Internet," said Lines. "A Sailor is going to be able to get on there and be able to see and chat with his wife. It'll be like *Star Trek.* It's coming, I'm sure."

Story by JOC (SW) Jim DeAngio, public affairs officer, USS Tarawa *(LHA 1).*

Infrared Eye

The 1989 *Exxon Valdez* oil spill in Alaska dramatically illustrated how damaging and expensive oil spills can be – wildlife was stained black with oil and one of the world's most picturesque locations was forever tainted. Millions upon millions of dollars have been spent to repair the damage and it will be years before the ecosystem is as it was before the accident.



Primary to the successful containment of an oil spill is quick, effective identification and cleanup. The Navy recently developed new technology to reduce the possibility of – and potential damage from – oil spills during harbor operations.

It's called the Infrared Camera Leak Detector and it uses infrared technology to locate and catagorize oil spills in harbor waters. The camera works by highlighting the oil's heat signature, allowing Navy personnel to easily track, contain and clean up spilled fuel. The camera's digital images can be stored on a removable disk and downloaded to a computer for further analysis.

"The infrared camera has become a major player in our spill prevention program," said Daniel Nichols, Natural Resource Management Spill Team Leader at NAS Joint Reserve Base New Orleans. "We are very excited about this new technology."

Major spills occur most often during refueling operations and can cost as much as $100,000 per spill to clean up. These costs are expected to decline by about 25 percent due to the camera's ability to provide early detection – allowing the spill to be attacked before it can spread.

Other uses for the Infrared Camera Leak Detector are also being evaluated, such as inspecting double-walled storage tanks for leaks and verifying hazardous waste storage tank level and temperature.

This new camera system will help to reduce costs, streamline procedures, and create a safer, healthier work environment for Navy personnel.

Story and photo by Anthony Vendetti, Naval Air Warfare Center, Aircraft Division, Lakehurst, N.J., and Dan Glass, N45.

Letternet



While on deployment, Sailors and Marines have long waited with anxious anticipation for the "thump-thump-thump" of a helicopter setting down on the aft end of their ship. They knew that helo was carrying the mail and perhaps a letter from their sweethearts or a care package full of treats.

But USS *Mount Vernon's* (LSD 39) current deployment is different. The crew is using the Internet to keep in touch with family and friends stateside.

"Night and day," is the description used by Electrician's Mate 1st Class Paul A. Rochau when he talks about the difference between conventional mail and the Internet. "You have more rapid communication with your spouse and family. I can stay current with events back home, instead of waiting for three or four weeks to get a letter."

Even the traditional "care package" has not escaped *Mount Vernon's* cyber-revolution. Rochau, from Kenosha, Wis., joked about his ability to order care packages. "It cuts turn-around time by months," he said.

Other crewmembers agree. "With e-mail, I get at least two messages a day. With conventional mail, I haven't gotten one letter," said Boatswain's Mate 1st Class Timothy J. Broderick, from Philadelphia.

The advantages brought by electronic mail are not limited just to keeping in touch with family and friends. It also is a faster way for crewmembers to keep track of their personal affairs while deployed.

"Let's say you have to make sure a payment is made," said Interior Communications' (Electrical) Mate 2nd Class David A. Shaffer, from Savannah, Ga. "With e-mail you can be sure a payment is made in a timely manner so it won't affect your credit."

There are still some Sailors, like Boatswain's Mate 1st Class Charles S. Foley, from Colorado Springs, Colo., who stand by the conventional system of sending and receiving mail. "Electronic mail is not a substitute for hand-written mail by your loved ones," he said.

Though there are some who sympathize with Foley's feelings, one great benefit of e-mail as observed by Boatswain's Mate Chief Michael J. Santos, a Guam native, is the positive effect on the morale of his Sailors.

"E-mail has been a tremendous boost to the morale of the crew," Santos said.

Mount Vernon's deployment to the Arabian Gulf is not just taking her to foreign ports and international waters – she's sailing straight into the 21st century.

Story by LTJG Koma B. Gandy and ENS Michael T. Ennor, USS Mount Vernon *(LSD 39).*

H O T L I N K

For more information on the Infrared Camera Leak Detector or about successful pollution prevention technologies conducted under the Pollution Prevention Equipment Program (PPEP), visit **www.lakehurst.navy.mil/p2/index.htm**



Postcard From the Fleet



Name: Mess Management Specialist 2nd Class (DV) Charles L. Bloom

Command: Shore Intermediate Maintenance Activity, Norfolk

Hometown: Cheboygan, Mich.

Hobbies: Landscaping

Favorite Duty Station: SIMA Norfolk

Favorite Quote: "The only easy day was yesterday."

Keys to success: "Sticking to it. Putting forth your best effort."

Goals: Advancement to first class petty officer



Photos by JO1 Ron Schafer

Seminars via Satellite

This past year, the Navy began testing a pilot program aboard USS *George Washington* (CVN 73) and USS *Carl Vinson* (CVN 70) in which 60 stateside instructors interacted with deployed Sailors by using real-time video teleconferencing (VTC).

The video system uses a device called "codec" which encodes and decodes multiple signals instantaneously via satellite. For the first time, students were able to actually see and talk with their professors as the courses were being taught.

The program is still under review and it is unlikely that it will be employed by every ship in the fleet anytime soon. In fact, right now only carriers and command ships have the hardware to make it happen. However, the possibilities are intriguing.

"It brings the campus environment to the ship in real-time and allows the Sailors to become part of the university experience," said ENS Scott Hafley, *Carl Vinson's* educational services officer. "The college students on campus are able to interact with the Sailors – which provides for interesting feedback and a great learning experience for both sides."

Programs like VTC learning for deployed Sailors are vital in this new information age, where getting an education is no longer something nice to do. It is absolutely critical for advancement and quality of life.

Story by USS Carl Vinson *(CVN 70) Public Affairs.*



Keeping PACE

Taking college courses at sea can be stressful. This isn't a posh, ivy-covered campus in the middle of Massachusetts – this is a haze-gray, missile-launching weapon of global diplomacy somewhere in the middle of the Atlantic Ocean. Between general quarters, fire parties, weapons tests and the myriad of other evolutions Sailors must contend with on a daily basis, when is anyone going to find the time to study? Well, for those who can, the Navy's Program for Afloat College Education (PACE) just got better.

PACE isn't new, but this past year it underwent a major overhaul. In the past, Sailors could only take lower-level courses and earn their associate's degree while deployed or overseas. PACE is now offering every Sailor, on every ship – and in several, isolated, overseas sites – the chance to earn not only a bachelor's degree but graduate credits as well.

"This is certainly a dream come true for those Sailors who don't have the money, time or opportunity to complete their advanced degree in a regular setting," said Dr. Frances Kelly, director of Navy Voluntary Education Programs, Navy Annex, Arlington, Va.

"The greatest thing about the expanded program is that Sailors now can earn a four-year degree in public and business administration as well as in computer science. And they do it at their own speed using CD-ROMs and the Internet," said the Buffalo, N.Y., native. "It's simple. Sailors can just plug in their own computer, put in a disc and go off to some corner and begin class. Having the courses on CD-ROM offers Sailors the flexibility to take them anytime – anywhere they want. More importantly, Sailors don't have to worry about getting 10 or more people in a room to synchronize with instructors back home like they do for the interactive or teleconferencing classes."

Kelly concedes there aren't yet as many courses available on CD-ROM as there are on the interactive video, but she is also confident that it will happen and happen soon.

The Navy is also looking to expand the Internet to Sailors.

"Ships that have satellite capability will get access sooner than the others, but that too will change," said Kelly. "Some colleges, like the University of Phoenix, offer a complete degree program via the Internet. If you combine both of these avenues, there's no reason Sailors can't get a degree."

The computer-based courses aren't the only improvements being made to PACE. Transcripts are also being revamped.

"Transcripts given to Sailors will look exactly like the transcript of everyone actually on campus," said Kelly. "And the exams are now graded by professors at the universities involved.

So instead of curling up with a good book, watching videos or playing computer games, use your off-duty hours to earn credit toward your degree. With the new technology available, it's well within your reach.

Story by Patricia Oladeinde, staff writer for All Hands.

Commands interested in signing up for the program should review NAVADMIN 151/95. More information is available by calling Frances Kelly at DSN 223-1749 or (703) 693-1749.

Year 2000 Website

The Navy's Y2K project office has launched a new website that can be accessed using either of the following addresses: **http://www.cnoy2k.navy.mil/ny2k/ny2k.htm** or **http://199.211.210.88/ny2k**

The site was designed to help project officials manage Navy-wide computer problems and to keep Sailors informed of their progress. The site contains a wide variety of Y2K information, to include: points of contact, compliance checklists, recent news releases and even links to other military, federal and civilian Y2K resources online. It will also permit authorized users to access the Navy's Y2K reporting database for testing, assessing and certifying computer-related Y2K problems.

With more than 30 percent of the Navy's computer systems already Y2K compliant, this website will be a valuable asset in helping to upgrade the remaining systems.

For more information, call the Project Office at DSN 329-3050 or(703) 601-3050.

Story by JO2 Jeremy Allen, All Hands.

Trimming Your Waste

Ships generate a large volume of domestic waste. Taken together, solid waste and sewage can become a threat to the safety and health of the crew if handled improperly.

Navy ships do not have the luxury of being able to deposit their solid waste in landfills, nor can they discharge their sewage to environmentally-sound treatment plants. In fact, Navy ships have very little space and very few personnel they can dedicate to waste processing. Yet, they still must comply with stringent new waste-disposal regulations imposed by the international community. How will they do it? With new capabilities, revolutionary systems and streamlined processes.

The Chief of Naval Operations and Naval Sea Systems Command are developing an integrated waste processing system which will allow ships to circumnavigate the globe without restriction due to environmental wastewater regulations. The concept is to integrate all liquid waste – bilge water and sewage – handling and processing systems into one interconnected system with a centralized waste destruction module (incinerator) aboard all new ships. This will give Navy ships the capability to collect and destroy their own liquid wastes at sea without replenishment ship support. Advanced filtration, combustion and computer technologies are being combined to reduce maintenance, operator attention and waste handling requirements.

For example, the large amount of liquid waste generated daily can be reduced by using advanced filtration technology. Sewage can be separated readily into two components, heavy-solids brine and clear water, by subjecting it to specialized filtration technology known as membrane filtration. The clear water fraction is clean enough to be discharged overboard. The onboard centralized waste destruction module can process the remaining waste, heavy-solids brine.

Navy researchers are also experimenting with new thermal combustion technologies. Computer simulations and dynamic combustion models are being used to develop a compact and environmentally-sound thermal destruction module. This module will destroy the waste streams generated by the bilge water and sewage membrane treatment units. A computer-based controller will be used to direct and monitor all processes, and report status and casualty information to the ship's damage-control station.

Benefits of integrated liquid waste processing aboard ship

1. Sailors have less interaction with shipboard waste.
2. Separate liquid waste control systems will be reduced to one centralized controller.
3. Ships will not have to adjust their operations to discharge or offload liquid wastes in certain areas.
4. Ships will depend less on shore facilities and may be able to visit ports lacking waste disposal facilities.
5. The high cost of bilge water, sewage and gray water disposal abroad will be reduced.
6. The environmental impact of fleet operations will be reduced by cutting down on the overboard discharge of bilge water, sewage and gray water.

Prototype systems have been tested with great success aboard USS *L.Y. Spear* (AS 36) and USS *Carney* (DDG 64). As a result, new ships are being designed with these new waste-disposal capabilities beginning with the *Arleigh Burke*-class destroyer USS *McFaul* (DDG 74).

Story by N45 Public Affairs

Brute Strength

Chief Engineman (SW/CC) Arthur Green recently broke the national deadlift record during an Amateur Athletic Union (AAU) competition held in Waimanalo, Hawaii.

Green, assigned to Naval Station Pearl Harbor, lifted 606 pounds while competing in the 242-pound, sub-masters class.

Waimanalo was Green's first competition as a power lifter. This summer he will compete in the RAW Nationals in Irvine, Calif.

"RAW means without supportive equipment other than a belt," Green explained. "In a lot of other competitions, you are allowed to wear supportive equipment such as bench shirts. This equipment allows you to be able to lift more weight. RAW is all brute strength."

Green has been building strength for 12 years, ever since he was put on the Navy's weight control program. "I owe all of this to the Navy. Being put on [weight control] was the best thing that could have happened to me," Green said. "If my command had not adhered to Navy policy, who knows where I would be today. I just hope this story will help inspire or motivate someone to switch to fitness and be a winner. It takes patience, good nutrition and hard work. If you want it bad enough, it can be done!"

Story by JO2 Lori Moore, public affairs office, Naval Station Pearl Harbor.



Photo by JO2 Lori Moore

ENC(SW/CC) Arthur Green lifts 606 pounds to break the national deadlift record.

Navy Hospitality

The first Navy Lodge to be built with cedar-shingle siding recently opened in Dam Neck, Va. Sitting on the bank of Red Wing Lake, the two-story lodge is one block from the Atlantic Ocean.

The 50-room Navy Lodge offers rooms with queen-sized beds and two double beds. There are also business suites and handicapped rooms available. All rooms have fully equipped kitchenettes with microwave ovens, coffee makers and toasters.

The new lodge offers many special amenities including color TV/cable/video cassette players, hair dryers, cribs, video tape rentals, laundry facilities and a children's play area.

The lake is stocked and ready for fishing and the front

continued on page 12

continued from page 11

desk can help with obtaining a fishing license.

Navy Lodge reservations are accepted up to 60 days in advance for active-duty personnel in a leave status and anytime for active-duty on permanent change of station (PCS) orders. Retired personnel, reservists, DOD personnel and official guests of the command can make reservations up to 30 days in advance.

Reservations are held until 6 p.m., unless guaranteed with a credit card. Registered guests cannot be bumped to accommodate other guests.

To make a reservation or to get a copy of the Navy Lodge worldwide directory, call 1-800-NAVY-INN.

Story by Navy Exchange Command Public Affairs.

Video-healing

Imagine leaving work to visit a doctor 180 miles away and returning an hour-and-a-half later.

Not possible?

It was made possible for Steel Worker 2nd Class Travis Schellpeper of the 31st Naval Construction Regiment at Naval Construction Battalion Center, Port Hueneme, Calif., by a managed care telemedicine demonstration program sponsored by the Office of the Lead Agent, TRICARE Southern California.

Schellpeper was suffering from an inner-ear injury that his primary care doctor, LT (Dr.) Chris Graves, was unable to diagnose. Graves referred Schellpeper to CAPT (Dr.) Darrell Hunsaker, an ear, nose and throat (ENT) specialist at Naval Medical Center San Diego.

But Schellpeper never left Port Hueneme. He visited Hunsaker via computer and received the same quality care as if he had made the 360-mile round trip.

According to Lt. Col. Alton Powell, III, USAF, a flight surgeon who coordinates the telemedicine program, "We're going to change the way health care is delivered in DOD. And we're going to do it by applying off-the-shelf, state-of-the-market technology to proven medical processes at a substantial savings



HM3 John Mulroy uses an otoscope to probe SW2 Travis Schellpeper's ear in Port Hueneme ... while CAPT (Dr.) Darrell Hunsaker examines the inside of his ear via computer in San Diego.

Touch-down

While skydiving one day in 1974, Angus H. Rupert came to the realization that the human body can collect a tremendous amount of information through the skin. Because Rupert also flew planes – when he wasn't jumping out of them – he was immediately taken by the idea of creating a system of non-verbal communication in the field of aviation – a system that could somehow transmit information to pilots by exploiting their sense of touch.

But it wasn't until 10 years later, when he reported to the Naval Aerospace Medical Research Center in Pensacola, Fla., that his idea began to take shape – that shape is now known as the Tactile Situational Awareness System (TSAS).

TSAS consists of a matrix of tactors (small sensors) fitted into an existing piece of apparel, such as a pilot's cooling vest. The tactors emit a series of stimuli based on information gathered by a small, portable computer from aircraft sensors monitoring attitude, velocity, altitude, etc. This data is converted, through a series of algorithms, into information that is presented as a series of vibrations and electrical impulses, to the wearer.

For example, in reacting to the pitch and roll of an aircraft, the tactors apply stimuli to different parts of the wearer's torso as a continuous reminder of which direction is "down." Because of the multitude of conditions in which pilots are required to fly, disorientation can be a common hazard, making the need for TSAS obvious.

"The key to the system is that this information is very intuitive," explained Rupert. "The pilot does not have to think about what they are doing by looking at a visual instrument, they can react to what they feel."

As Rupert was developing TSAS, he discovered that the system had applications beyond the aviation community. Navy divers, SEAL teams, and Explosive Ordinance Disposal (EOD) teams can also benefit from the awareness TSAS provides.

"One of the principal advantages of the system is that it provides a form of non-verbal communication between the user and a stationary position," said Rupert. "It's clandestine. It combines safety and improves the performance of personnel. For instance, divers can use it to give navigation information — left, right, up, down — which increases war-fighting capability."

Although it has yet to be attempted, Rupert said the capability exists for the system to be set up for two-way communication.

Fleet use is still years away – the system is still in research and development. But, Rupert has little doubt of the system's potential for success.

"It creates an intuitive man/machine interface that will reduce operator workload and provide situational awareness in a more efficient way."

Story by JO1 Ron Schafer, a Norfolk-based photojournalist assigned to All Hands.

to the government and our beneficiaries in terms of dollars and [time]."

"Our program is based on a managed-care paradigm," continued Powell. "The basis of managed care is providing medical treatment by the right provider at the right time. Telemedicine [uses] technology to deliver the right care at the right time."

The TRICARE telemedicine program will eventually apply to several different specialties. But for now the program is focusing only on ENT referrals in order to collect data that will serve to illustrate the true cost and time savings to patients and the government. Based on data collected so far, Powell estimates that by the end of the nine-month experimental period, the program will have saved, on average, $240 in travel costs and 14 hours in travel and processing time per patient. The communication cost for a telemedicine visit is $20.

"This technology is as good as being there in person when it comes to making clinical decisions," said Hunsaker. "The biggest benefit of the program is the patient satisfaction," said Graves. "They feel like they've gotten as good, if not better, care without having to drive."

Patients involved with the program were enthusiastic about the possibilities. "I saw no difference in quality," said one, "except that I was assured my problem was genuinely considered by multiple specialists. This made me feel good. The Navy needs to expand this concept."

"It's an outstanding program," agreed Schellpeper. "It saved me a trip to San Diego and at least a full day of work."

Story and photos provided by LT Rick Haupt, public affairs officer, TRICARE Region 9, San Diego.



Holographic *Hornets*

Boeing recently installed the first Carrier-based Weapons System Trainer (CV-WST) on board USS *Independence* (CV 62) to help pilots from Carrier Air Wing 5 (CVW-5) practice flying the F/A-18 in a variety of scenarios. The simulator has only been in use since January and is already a big hit.

"The best benefit is maintaining and sustaining aircrew readiness," said LCDR Bryan Kust, operations officer for CVW-5, who has flown the simulator twice. "Particularly in simulating high-threat environments and fourth generation fighters. The visual presentation is very realistic."

The CV-WST is used for Naval Air Training and Operating Procedures Standardization (NATOPS) checks, normal emergency procedures and other flight ops. It also simulates weather conditions and enemy threats.

Although the simulator is primarily for pilots, it can be used by a variety of aviation rates. Aircraft mechanics can simulate engine fires and other contingency situations.

In the past, "training was held on static displays," said Kust. "Now, mechanics can get more of an interactive type training."

Crash and salvage personnel are currently looking for ways to use the CV-WST as well.

Story by JO2 Henry W. Rice, public affairs office, USS Independence *(CV 62).*



Photos by PHAN Chris Howell

(top) The flight simulator allows pilots like LCDR Bryan Kust from Pennington, N.J., more time to train even though he's forward deployed to the Arabian Gulf in support of Operation *Southern Watch.*

(bottom) Kust gets ready to begin a training session in an F/A-18 *Hornet* flight simulator aboard USS *Independence* (CV 62).

Emerging FROM THE

By Jeffrey L. Benson

What's your image of a mast? A long pole rising from the deck of a cutter with sails unfurled? A tall, slender, vertical structure covered from top to bottom with flags, yardarms, ladders, radar antennas and communications equipment? Well, it doesn't matter. Because the Advanced Enclosed Mast and Sensor (AEM/S) System is unlike any other mast you've ever seen. In fact, it doesn't look like a mast at all.

The AEM/S System, a bi-pyramidal, hexagonal structure made of an advanced, hybrid-composite material, looks like something straight out of science fiction. All antennas and equipment are enclosed, some are even embedded in the structure itself, giving it a smooth, sleek, 21st century look.

The mast was designed and built by an Integrated Process Team, known as the "MASTers," made up of technical experts from Navy activities and private industry nationwide.

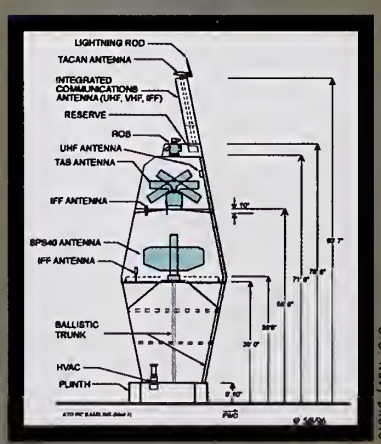
Last year, the AEM/S System was installed aboard the *Spruance*-class destroyer USS *Arthur W. Radford* (DD 968), replacing her conventional main mast and beginning the demonstration phase of the Advanced Technology Demonstration (ATD) for the AEM/S System.

Radford's Sailors will provide the MASTers – and the fleet – with crucial feedback on the system's warfighting capabilities.



■ The shadow of the old mast falls on the new Advanced Enclosed Mast/Sensor System on USS *Radford* (DD 968). Its prime directive is, "Nobody gets hurt."

U.S. Navy photo



U.S. Navy photo

Concept Description:

■ Large Composite Structure holds lighting rod, TACON antenna, integrated communications (UHF, VHF, IFF) antenna, IFF Antenna, SPS40 Antenna.

■ Advanced trunk composite exterior is made up of a five-layer sandwich of PVC foam and circuit boards that provide structural integrity while allowing radarwaves to pass through.

Shadows OF THE PAST

A revolutionary concept in mast design, the new AEM/S System will greatly enhance the surface fleet's tactical capabilities. By allowing a clearer view of the horizon, the system will eliminate false targets associated with metallic mast protrusions and solve interference problems that often affect the performance of conventional ship sensors and radar. This will allow warfighters to engage threats earlier – and with greater accuracy. In fact, *Radford's* Sailors anticipate significant improvements in her surface-to-air missile system effectiveness.

Because it is an enclosed structure composed of advanced-composite, specially-coated materials, the AEM/S System will significantly reduce the ship's radar signature, while protecting radar and communication equipment from the weather – greatly reducing repair frequency, maintenance costs and risk of failure.

And enhancing crew safety.

"You don't have to worry about wind or weather. You can do maintenance anytime," said Electronics Technician 2nd Class Ronald Stewart, supervisor of the radar maintenance on board *Radford*. "Because you're standing on a solid deck, you will be better able to concentrate. You will be safe and able to do your job more efficiently."

Radford's crew continues to sail beneath the shadow of this radically restructured mast, evaluating and testing the system and its impact on such things as maintenance, ship handling and helo operations. "We tried our best to shake it off and we couldn't," said CDR Kurt W. Tidd, the ship's commanding officer. "It's going to stay there forever."

Benson is a manager of the AEM/S System ATD, Naval Surface Warfare Center, Carderock Division.



U.S. Navy photo

■ USS *Radford* (DD 968) and the new Advanced Enclosed Mast/Sensor System.



Photo by Jeffrey L. Benson

■ ET1 Pat Jensen and ET1 Ron Stewart perform PMS on the SPS-40 antenna loft inside the mast, 45 feet above the 03 deck, without regard to wind, sun or rain.



Fi

Photo by HMCS(SW/NAC) Daniel J. Forburger

By JO1 Ron Schafer

restarter

A Navy ship can be a dangerous place. When a fire breaks out on board ship, there is nowhere to run – nowhere to hide. The choice: put out the fire or burn. Sailors spend hours upon hours training for that day, hoping it will never come – running drill after drill after drill.

But drills aren't anything like the real thing. Sailors, particularly those aboard aircraft carriers, rarely have the opportunity to train for fire-fighting evolutions against the real enemy. Because hydrocarbon fuels are environmentally unsound and expensive, Sailors are forced to simulate fire aboard ship – but maybe not for much longer.

Meet MAFFTD, or the Mobile Aircraft Fire Fighting Training Device. After years of frustrating attempts to develop a way to train firefighters at sea, officials at Commander, Naval Air Force U.S. Atlantic Fleet (COMNAVAIRLANT) saw

the potential for a portable, reusable system that could be used on the deck of an aircraft carrier or at shore installations to provide realistic scenarios for training. Late last year, they found one – MAFFTD.

MAFFTD burns propane, a clean-burning fuel that meets all EPA criteria, and requires no containment area. Those features also make it far less expensive to operate and maintain.

"We found that with this system we can have an unlimited number of scenarios," said Clarence A. Rout, Fire Marshall, Naval Facilities Engineering Command (Atlantic Division). "With the old system, we just dumped fuel out on the ground and lit if off. It made one big fire and we put it out."

"MAFFTD gives you more realistic training because you can have engine fires, smoked-up cockpits, cargo fires, fires on both sides of the fuselage, whatever you want. Or you can just smoke the unit up – which gives you the opportunity to train on the self-contained breathing apparatus (SCBA)."



MAFFTD can be configured to resemble different types of aircraft. Putting it on board ship gives fire fighters the opportunity to use their own gear, in their own environment, facing actual flames. The realism it creates is invaluable.

"They're going to be ready," said Bud Williams, Training Chief, Naval Station Norfolk Fire Department. "We saw it last year when we went on the ship. You could see it in their faces. They know how their equipment works. They have confidence in themselves. They're not at another place using somebody else's equipment."

Last year, a similar unit was used for a crash and salvage training competition between Norfolk-based ships including USS *Dwight D. Eisenhower* (CVN 69) and USS *John C. Stennis* (CVN 74). The response from firefighters who participated was overwhelming.

"It's state-of-the-art," said Aviation Boatswain's Mate (Aircraft Handling) 3rd Class Henry B. Burns, stationed aboard *Ike*. "You have actual fire-fighting situations inside the aircraft. It gives you a look at what you would really see if something happened out at sea. You actually got to get into the aircraft and fight the fire while you were inside."

Continued on page 20

A fire fighter pulls a hose into the Portable Aircraft Fire Trainer during training at Naval Station Mayport, Fla. The unit is part of the Aircraft Fire Fighting Unit from Norfolk.



Photo by PH1 Brian Montgomery

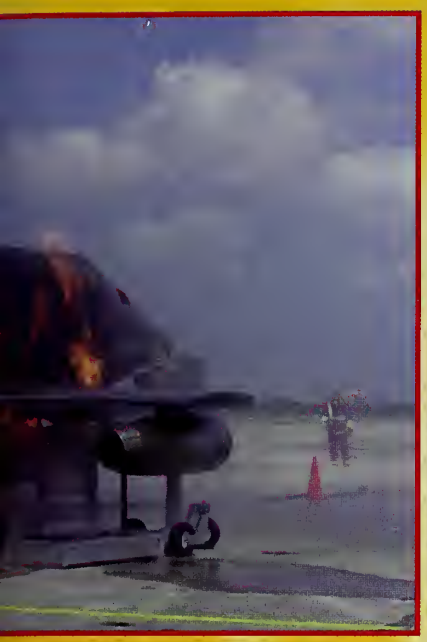


Photo by PH1 Brian Montgomery

The Portable Aircraft Fire Trainer at Naval Station Mayport, Fla. The unit is a burnable, reusable mock-up of an aircraft.

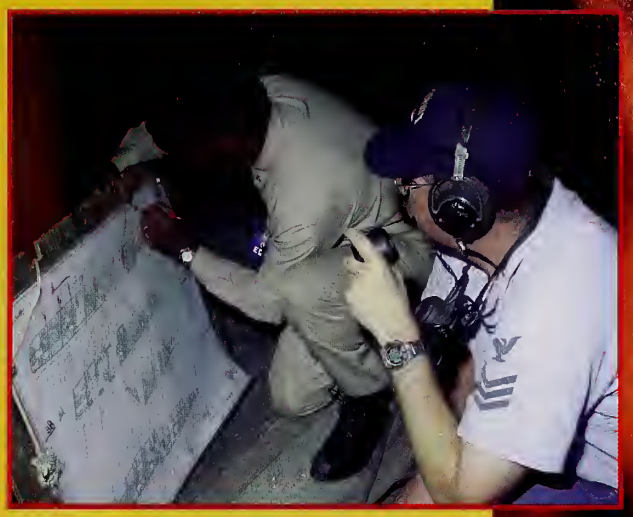


Photo by PH1 Brian Montgomery

USS *McInerny* (FFG 8) Engineering Duty Officer, CWO2 Ferguson of Blackville, S.C., plots information given to him by phone talker FC1 Deegan of Barberton, Ohio.

Quick Fix

Sometimes the most difficult problem can have the simplest of solutions. That was certainly true for Electronics Technician 2nd Class Michael Cigala of USS *Carl Vinson* (CVN 70). Cigala needed just five minutes to solve a problem that had been dogging air traffic controllers for years.



Photo by PHAN Ineke Forebee

ET2 Michael Cigala "rigs" another gas mask for use in *Carl Vinson's* air traffic control center. It took Cigala just five minutes to find a way to integrate a boom-type microphone with the standard MCU2P gas mask used in the ship's CBR drills.

"There are no designs for gas masks to be used with our boom headsets," said Air Traffic Controller 1st Class Thomas Schrock. "The controller has to literally yell through the mask to talk to the aircraft, while holding the boom up to the mask, and hope the pilot can understand."

Data Systems Technician Senior Chief (SW) Nicholas Potter, leading chief for *Carl Vinson's* combat systems, first recognized the seriousness of the situation during a general quarters drill.

"I was walking around while we were at MOPP (Mission-oriented Protective Posture) Level 4 and everyone had a gas mask on," Potter said. "But in air traffic control some Sailors weren't wearing their masks. I asked 'Why?' and they explained that they were talking to aircraft on live circuits and that they just couldn't do it safely with their masks on."

MOPP 4 is the highest state of readiness for chemical, biological or radiological warfare and requires all hands to take protective measures. These measures include the wearing of gas masks. For the air traffic controllers, the choice is not easy: personal safety or taking care of aircrews.

"It's a deadly situation," said Air Traffic Controller 1st Class (AW) Jesse Box.

The problem needed a solution. So Potter challenged Cigala to find one. After analyzing the situation for a little more than five minutes, Cigala came up with the answer. He opened up the handset portion of the headset device and soldered the microphone audio wire ends, then ran them to the front of the gas mask. With a borrowed microphone installed in the mask, the new system was ready to be "op tested." It was as simple as that.

"It was neat when Cigala brought the first prototype over," said Schrock. "This thing looked prehistoric but it worked."

"With the new modification, air traffic controllers will be able to speak normally to aircraft in the air," said Air Traffic Controller Chief (AW) Bob Kaetterhenry. "The wire jack is real handy. We don't have to change headsets in the process of putting on the mask."

Cigala received $2,500 for the innovation as part of the Navy's Beneficial Suggestion Program. After the idea moves through the chain-of-command, field change instructions could be issued to the fleet, giving Cigala's invention legs that could take it around the fleet.

Story by USS Carl Vinson *(CVN 70) Public Affairs.*



Photo by PH1 Brian Montgomery

Sailors battle a fire started by MAFFTD.

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"Having hands-on experience with actual fire just doesn't compare to what we used to do," explained Aviation Boatswain's Mate (Aircraft Handling) 3rd Class David W. Musgrave, also stationed aboard *Ike*. "Most of the time, crews never really see a fire. They train with an invisible fire. The difference between using a hose that's not filled with water and nothing going on around you and having this thing that's on fire – it's hot, you've got a 250-pound hose you're spraying water with – it lets you see every aspect of the fire around you. It makes a big difference. You'll never know the danger unless you actually see it."

Rout added that fire fighters are not the only ones who will benefit from having MAFFTD on board. The entire damage control team will be able to get involved.

"It gives ships the opportunity to bring up their repair parties and actually give them something to work with," said Rout. "So, it involves others on the ship to where they can really run an exercise and not just simulate everything."

The current plan calls for the Navy to purchase at least 12 MAFFTD units and to disperse them regionally in order to provide access to as many units as possible. The first MAFFTD should be available to Norfolk-area ships as early as this fall. According to Williams, the fleet will welcome the opportunity to train using MAFFTD.

"The realism is the biggest thing. To quote one fire-fighter I talked to, 'We like this because we're not just out there spraying water on an open field or on a 55-gallon drum. We get to actually fight the demon.' Anytime you can take a fire fighter and let him fight fire, he's happy."

Schafer is a Norfolk-based photojournalist assigned to All Hands.

The Right Stuff

Prevention is the key to successful fire management. But when fires do occur, quick and decisive action is required – and so is the right stuff.

Aqueous Film Forming Foam (AFFF) is one of the most effective fire-fighting agents, but its use is often restricted due to environmental concerns. That's because when AFFF is used, thousands of gallons of wastewater are generated. So how do you test equipment and run drills without using AFFF? By using the No-Foam Kit.

The kit uses a biodegradable and environmentally benign water-based dye solution – instead of AFFF – during drills. This soluton responds just like AFFF so firefighters can test the fire truck's delivery system. But, costly AFFF wastewater is eliminated.

The No-Foam Kit is installed in the truck's interior piping. From the cab a fire-fighter presses a button to activate the kit and continues with the normal discharge procedure. Using a flow sensor installed in the truck's piping, the firefighter can determine the truck's AFFF delivery system performance. If a "real" fire alarm goes off during a test, the firefighter simply deactivates the kit and the truck is ready to respond with AFFF.

Depending on the vehicle, the kit reduces AFFF wastewater generation by 500 to 1,500 gallons for a five-second test. Navywide, this equates to more than $10 million in annual savings or an estimated $1 million per installation. The kit costs about $7,500, including parts and installation – it will pay for itself in less than two weeks.

The Naval Facilities Engineering Service Center developed the No-Foam Kit, which has been endorsed by the Navy Fire Marshal. Naval Facilities Engineering Command plans to convert all crash fire rescue trucks to this dye-water system. The AFFF dye kit will also be integrated into the next generation of shipboard crash/fire rescue systems and retro-fitted to existing systems. The kit is available through the U.S. Air Force Manufactured Equipment Evaluation program and can be used throughout DOD and in the private sector.

Information provided by N45 Public Affairs.

For more information on the No Foam Kit visit www.nfesc.navy.mil/enviro/ps.

By JO1 Ron Schafer

Gearing UP

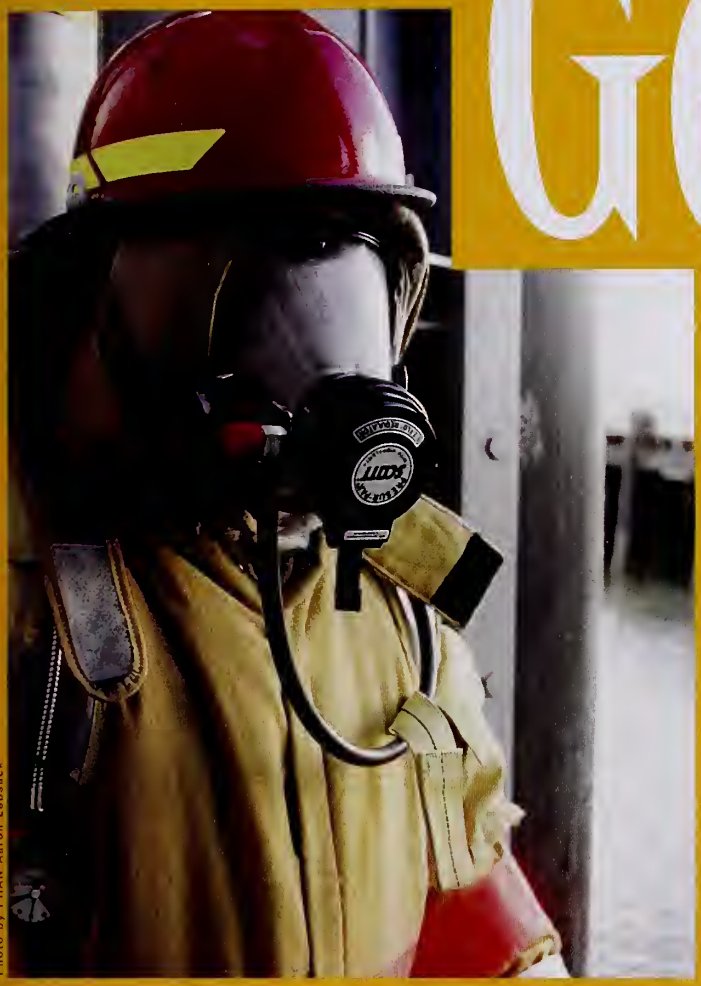


Photo by PHAN Aaron Labsack

A member of the fire team aboard USS *Harry S. Truman* (CVN 75). *Truman*, which was commissioned July 25, is the first ship to be outfitted solely with the Self-Contained Breathing Apparatus rather than the Oxygen Breathing Apparatus.

Three things are needed to fight a fire: confidence, experience and the proper equipment. Sailors train endlessly building the first two elements of this vital combination, but there is an organization within the Navy that is working just as hard to provide those firefighters with the final component – the tools they need to survive.

Established in 1987, CINCLANTFLT's Non-developmental Items Facility (NDI) plays a critical role in providing Navy ships and Sailors with the best damage control, firefighting and safety equipment on the market today. Sponsored by the Secretary of the Navy's Office of Safety and Survivability, they act as a liaison between the fleet and civilian industry, acting on initiatives to improve safety.

"A lot of our input comes directly from the fleet," explained Master Chief Damage Controlman (SW) Lloyd L. Broughton, director of the facility. The Navy holds a damage control and fire-fighting conference every year where problems are discussed and solutions reached. "We talk to Sailors. That's how we know what's going on out there," said Broughton. "We will also talk to vendors about new equipment and attend trade shows."

NDI was developed so the Navy could stop re-inventing the wheel, so to speak. Rather than incur the expense of developing a new piece of equipment, NDI will adapt an already existing product from the civilian sector.

For example, NDI will purchase a piece of gear and conduct a pre-assessment of the item. If the equipment meets their specifications, they will send it to a Navy platform (ship or station) for a quality assessment.

"We will never make a decision, at this level, to put something out in the fleet," said Broughton. "The fleet will say 'we like it' or 'we don't.' If they say they don't like it, that's the end of the story."

NDI will then provide the manufacturer with both the positive and negative feedback it receives from the fleet. The manufacturer can then improve the existing product or come up with a new one.

Getting a chance to work with new equipment is something that excites sailors aboard the Navy's newest amphibious warship, USS *Bataan* (LHD 5).

"It gives us an opportunity to get our hands on the newest gear that's out there," said Hull Technician 2nd Class (SW) Christopher S. Thompson. "We can get rid of some of the old, antiquated gear we have. It increases morale – when you get new equipment, people are excited to do their job, especially when they know they have the latest and greatest that's on the market."

NDI has evaluated hundreds of products over the past ten years from flash gloves and fire-fighting helmets to the RAM Fan 2000 and the Self-Contained Breathing Apparatus (SCBA). The best part of the program, according to Broughton, is that Sailors get to assess the gear.

The bottom line: NDI promotes readiness and quality of life for Navy Sailors. "If you're not having accidents, you're not losing the materials or the people," said Fred Crowson, technical director for the Secretary of the Navy's Office of Safety and Survivability. "You're better equipped to deal with any situation. It's also a quality-of-life issue. If you can do the job easier and better out there, it makes it easier for the Sailor to come to that ship every day."

Schafer is a Norfolk-based photojournalist assigned to All Hands.

Integrated Ingo



nuity



The creation of a new aircraft can be a slow and agonizingly tedious process. Once the initial requirements are established, a series of contractors will propose designs to meet those requirements and the bartering will begin – each one promising to do it better, faster and cheaper. This usually involves fly-offs and competitions, as each contractor tries to sell the Navy on its design.

When the Navy is confident that it has found the company or companies that will build all or part of the final aircraft (one contractor may build the airframe while another designs the interior electronic equipment), more details are provided and the aircraft goes into production.

Once a prototype has been developed, the contractor(s) will test the avionics, airframe, engine and other systems. Each time, the test results are turned over to Navy experts to review. Volumes of data will be collected over a course of (what can sometimes be) years. The plane is then turned over to the Navy and the process starts all over again as Navy engineers conduct duplicate tests and compare the results.

There has to be a better way. With the F/A-18 E/F *Super Hornet*, the Navy has found it.

From the beginning, contractors and subcontractors have been joined by a group of Sailors to form the *Super Hornet* Integrated Test Team (ITT). The purpose: to make sure the *Super Hornet* is fleet-ready – and to make it that way faster and more efficiently than any other military aircraft in history.

"I think that once this aircraft gets out to the fleet," said Chief Aviation Electronics Technician (AW) Jeffrey J. Woell, "Sailors will be really pleased with it, especially the maintainers."

Woell is one of the senior Navy and Marine Corps aircraft maintainers who serve as part of the ITT. Their presence at NAS Patuxent River, Md., is to bring the "fleet view" into the design of the new strike fighter.

"All the chiefs and petty officers we have here are experienced," said Chief Aviation Machinist's Mate (AW) Tony Rush. "We constantly pull data from the fleet side of the house. With that information we work with the manufacturer to make the aircraft better."

With the Navy team intertwined with that of Boeing, Northrop Grumman and other subcontractors, the *Super Hornet* can be put to the test without the need for costly and time-consuming duplication. As the F/A-18 E/F progressed from the drawing boards and design computers to initial full-fledged test aircraft, these Sailors have been there to look for flaws in the design which before might not be found until much later in the process.

"We try to catch deficiencies on the aircraft that could give the fleet a problem, said Chief Aviation Ordnanceman (AW) Gerald Gladders. "We have the upper hand here to make changes before the aircraft goes into full production."

"Last night is an example," said Woell. "We were out here trying to do an engine wash for the first time. The engineers' set up wasn't correct so we made an on-the-spot adjustment. Now it works fine. This is the type of change we can affect right here, right now."

What might seem a small change can have a significant impact in the long term. For instance, the team changed the screw heads on all aircraft fasteners to eliminate slippage problems for maintenance personnel in the fleet.

"That's just a basic improvement," said Woell, "but in the day-to-day life of Sailors on the carriers, it helps a lot."

Innovation is often thought of in terms of new technology and equipment. Sometimes it is just doing things in a different – and better – way. The F/A-18 E/F Integrated Test Team isproving just that.

Compiled by JOCS Steve Burghardt and PH1 Jim Hampshire, All Hands.

U.S. Navy photo courtesy of McDonnell Douglas



Photo by PH2 Ted Banks

A Navy SEAL emerges from the surf and prepares to send a coded message using a low-probability-of-detection tracking device, which provides real-time mission status and pinpoint location information on SEAL operators to facilitate combatant commander oversight.



Photo by PH1 Jim Hamp

Exploiting the latest in computer, satellite and digital imaging technologies, a Navy SEAL can provide near real-time information to decision makers, greatly enhancing speed of command.

A Navy SEAL performs live fire training during an evening exercise in an abandoned sandpit in the Federation of Bosnia.



Photo by PH1 Todd P. Cichanow

Beneath the cover of a moonless night, a solitary, silent figure crawls face-down through the darkness, moving slowly – almost imperceptibly – through the brush. He stops at the sound of voices somewhere in the distance. He raises his weapon from the forest floor and rests it gently on his upturned palm as he lowers his eye to the sight

Smart Weapons

By JO1 Robert Benson

and digs his elbows into the dirt forming a makeshift tripod. Two hundred yards away, a pair of border sentries stand their post in a green haze as the lens floods the bridge with light, turning night into day. He closes his left eye as the muscles of his right index finger twitch and contract. Once ... and then again ... and again – the shutter of his 500MM night vision telephoto lens snapping together in the blink of an eye. ▶



Photo by JO1 Robert Benson

The SEAL's digital surveillance camera stores the images electronically for a satellite uplink via laptop computer. Ten minutes later the images are received via a classified internet on board USS *Coronado* (AGF 11) where they are uploaded to an F/A-18 already in flight. A bomb is dropped and the bridge is destroyed. Thirty minutes after having taken the original photos, the SEAL is now capturing images for use in battle damage assessment.

The above is only a scenario, but the technology is real. Night vision goggles, laser pointers, mouth mikes, infrared scopes, laptop computers, digital cameras, portable sat coms – only a few of the many weapons a SEAL has at his disposal.

"The ultimate weapon is the SEAL himself," said LCDR Roger Herbert, executive officer of SEAL Delivery Vehicle Team TWO in Little Creek, Va. "But we are always looking for advancements in technology that will enhance the human dimension. That's what we focus on – using technology to build better-equipped, more-capable warriors."

That new technology was demonstrated last August during a training exercise in San Diego called Fleet Battle Experiment BRAVO. SEAL forces were



U.S. Navy phot

Whether lining up a target in the cross hairs of a long-range, high-powered, sniper rifle, or in the lens of a waterproof, digital camera, Navy SEALs never miss.

"The ultimate weapon is the SEAL himself."



U.S. Navy photo



Photo by PHC Ted Salois

America's preeminent maritime special operations force, Navy SEALs are renowned for their skills, both in, on and under the water. Operating as small elements in a clandestine fashion, SEALs help shape the battlefield environment long before the arrival of conventional forces.

tasked with photographing a target – in this case, a bridge – and relaying target information back to battle group commanders quickly and accurately.

SEALs photographed the bridge, stored the images on a laptop computer and then sent the pictures via an AN/PSC-10 radio to decision makers. The AN/PSC-10 is a tactical satellite communications radio used worldwide by SEAL operational elements. It is coupled to a high-speed, hardened, Pentium computer that can process large amounts of data and imagery files for rapid relay via satellite links. The whole apparatus is no larger than a briefcase.

After the battle group commanders received the images, they were posted



Members of SEAL Team TWO conduct SEAL Delivery Vehicle (SDV) training in the Caribbean.

Photo by PH1(DV) Andy McKaskle

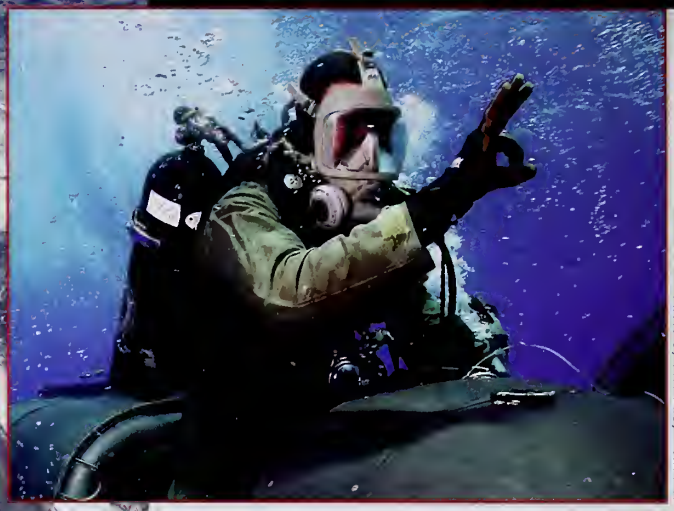


Photo by PH1 Andy McKaskle

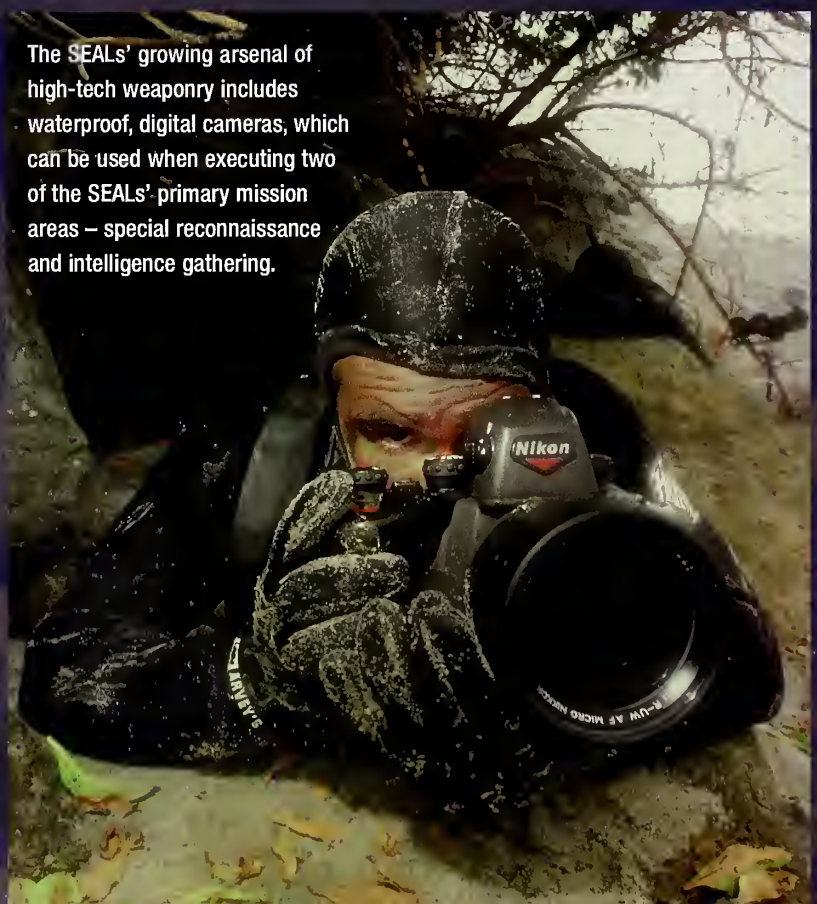
on the SIPRNET, a classified internet. From there, *Coronado* pulled the images and uploaded them to a *Hornet* pilot, who studied the images and completed the mission.

The whole process took a little more than a half hour. Without the photo and transmission technology, it would have taken days.

"The experiment showed that we can increase the speed of command," said Frank Clark, research, development, testing and evaluation department head at Naval Special Warfare Group ONE in San Diego. "We can now better facilitate the delivery of smart weapons through technology. SEALs have always been renowned for rapid response – and for being the operation commander's eyes and ears. Nothing equals a man-on-the scene, and thanks to technology available right now, we're marrying-up the man-on-the-scene with the decision makers. That's exactly what we did in this exercise. The technology works."

Many of the innovations now being employed by the SEAL community are the direct result of a West Coast Navy initiative called Quantum Leap, which Clark oversees.

"Quantum Leap is an effort we're doing in-house at Special Warfare Group ONE to take advantage of emerging



The SEALs' growing arsenal of high-tech weaponry includes waterproof, digital cameras, which can be used when executing two of the SEALs' primary mission areas – special reconnaissance and intelligence gathering.

Photo by PH2 Ted Banks

technologies and how they can be applied to special warfare," said Clark. "We take commercial off-the-shelf technology and see how – or if – it can be used by SEALs."

Since the program's inception 18 months ago, Quantum Leap has drastically improved command and control coordination through the use of waterproof, digital cameras; waterproof, image-stabilized binoculars; infrared lasers; video, remote-field sensors and low-probability-of-detection tracking devices, which SEALs wear in the field.

"Quantum Leap lets us look for ways to stay relevant into the next century," said Clark, whose role for the SEALs can almost be likened to James Bond's "Q." "We don't just want evolutionary technology, we want technology that will allow us to do things that nobody else can do. The SEALs are all about surgical, measured strikes. The technology we are bringing in supports that."

On the East Coast, Herbert agrees. "Right now SEALs are riding the crest of the high-tech wave, and are becoming the 21st century techno-warriors from the sea. We used to be the naked warriors in the 40s. But times have really changed. It always amazes me to see a crusty old senior chief get excited about a laptop computer. My guys have really embraced the technology. They love it."

For more information about becoming a Navy SEAL, call 1-888-USN-SEAL or visit the official SEAL website at http://webix.nosc.mil/seal

Benson is the assistant editor for All Hands. *LT Tyrus Lemerande also contributed to this story.*



Four Navy SEALs parachute from a Coast Guard C-130.

U.S. Coast Guard Photo



A Navy SEAL checks the accuracy of his coordinates before signaling LCACs onto the beach during an amphibious training exercise.

Photo by PH1 Stephen Batiz



By PH2 Joseph Gunder

Instantaneous Inform

When Commander-in-Chief of the Pacific Fleet ADM Archie Clemins speaks, people listen. For the past few years, Clemins has been the driving force behind Integrated Technology for the 21st Century, or IT-21 – a program designed to link all afloat and ashore commands to a single LAN that can be used to exchange classified and unclassified, tactical and non-tactical real-time information. Ships throughout the fleet are now being outfitted with computers to make that happen.

Data Processing Chief Michael Sandell is supervising the installation of more than 300 Pentium PCs aboard USS *Nassau* (LHA 4). "IT-21 will replace all of the outdated computers on our ship and enable us to 'share the wealth' by giving our 'old' computers to other ships."

IT-21 will eventually link every computer in the Navy via satellite – no matter where you are in the world, you will be able to communicate – in real-time – with commands half way around the world. There will be no need to wait for message traffic. Information will be sent electronically – the paper trail will essentially disappear.

The tactical advantages of such a system are mind-boggling. IT-21 will be able to provide units with a common operational picture. Network centric warfare will never be the same. Battlegroup commanders will be able to make tasking decisions and have them carried out almost instantaneously.

MAKE THE CALL

Remember the good old days when you would return from a long deployment and your spouse would greet you with a big hug, a warm smile and an $800 phone bill? Ugh! Well, a new development in shipboard communications can help you keep those costs under control–so homecomings will be more of a shock to your pocketbook.

A partnership between AT&T and Navy Exchange Command (NEXCOM) has developed what is called the "Global Personal Telephone System," or APTS – also known as "Sailor Phone." The system is designed around pre-paid calling cards that can be purchased from the ship's store in $10 and $20 increments. To use the card, simply pick up the phone, dial 000 then punch in the number from the back of the card.

According to Religious Program Specialist 3rd Class Brian L. Jameson of USS *Dwight D. Eisenhower* (CVN 69), "The cards are really nice when you're overseas. They are a lot cheaper than the calling cards you can get out in town."

According to CAPT Jack Prpich, Director of the Telecommunications Program Office for NEXCOM, APTS uses a civilian-leased, satellite link through *Challenge Athena* – a system used for providing two-way live video and data communications at sea. Larger vessels can use APTS around the clock but smaller ships within a battlegroup have to timeshare. However, with the implementation of IT-21, the signal could be piggybacked to give everyone access 24 hours-a-day, seven days-a-week.

When the time on your card runs out, your line will be disconnected. But don't worry, you can always buy another one – and a portion of the proceeds is donated to the ship's MWR fund. According to Prpich, $2.3 million dollars were donated to MWR funds fleetwide in FY96.

Don't be greeted by another monster phone bill. Get a card now. It's the best call you'll ever make.

Besides its many tactical benefits, IT-21 will serve to improve Sailors' quality of life as well. For example, Sailor Phones will be more accessible (see above). IT-21 will make it possible for all the ships in the battlegroup to share the same bandwidth at the same time, so Sailors will no longer be forced to plan their calls home around some abstract "window" – a window which sometimes requires them to phone at odd hours.

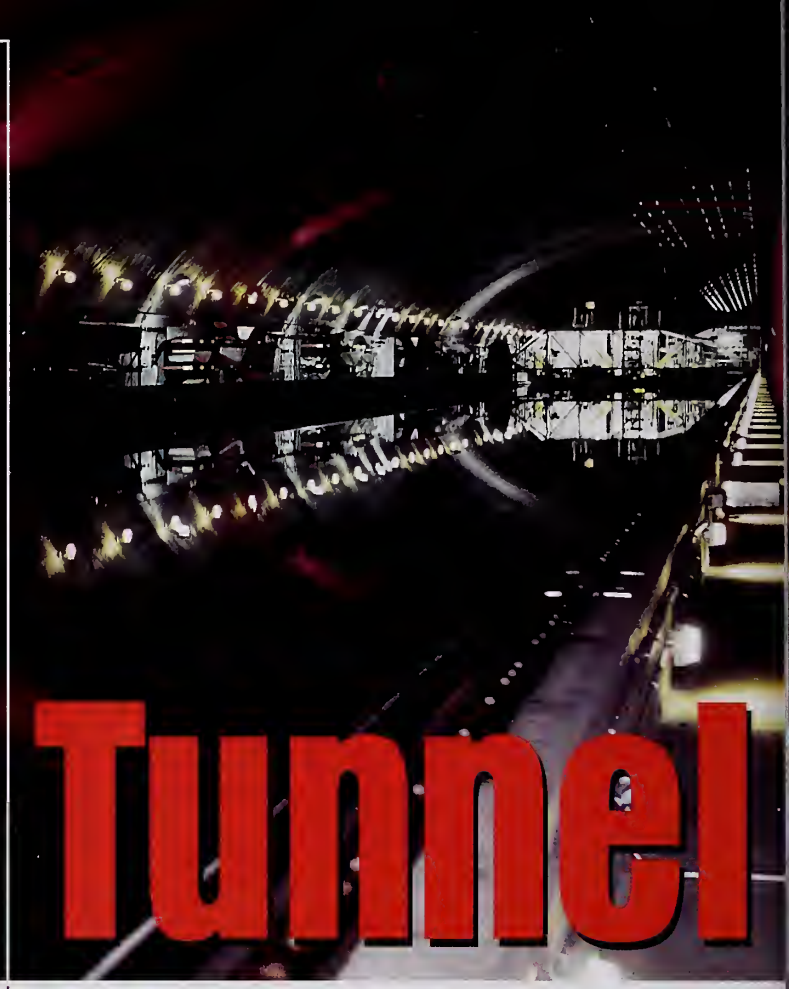
Constant links with other units can also help with procurement of supplies. For example, before IT-21 a Sailor had to use the computer in the storekeeping spaces to order parts – this almost always led to long waits and scheduling nightmares. With IT-21 that same Sailor can now access the Federal Logistics CD-ROM from any shipboard terminal. And according to Electronic Technician Senior Chief (SW) Jeff Rexford, 3M Coordinator for USS *Frederick* (LST 1184), "With these new fiber optic drops, we can put a LAN computer just about anywhere on board."

Clemins' plan is to have shipboard LANs sized to accommodate one PC for every officer and one for every five enlisted personnel.

Although the upgrades will take years to complete, Sandell can't wait. "I think IT-21 is the single biggest morale booster from E-1 to O-10. Some of these guys are out for the first time and they get homesick. With the improved e-mail access, they can now get a response in as little as 30 minutes."

Yes, the days when a Sailor had to sift through hundreds of radio messages, OPGENs, OPTASKs, etc., will soon be forgotten. With IT-21 Sailors will simply "log on" and "pull down" the information they need. No more waiting in line at the disbursing office. Sailors will get their pay information via e-mail and their money directly deposited into their bank accounts. Birthdays will be shared, anniversaries celebrated. Sailors will have information at their fingertips. IT-21 is here – and the Information Superhighway is calling.

Gunder is a photojournalist assigned to All Hands.



Tunnel Vision

By JO2 Jeremy Allen

As you stand at the end of the Navy's David Taylor Model Basin at the Carderock Division in Bethesda, Md., you immediately feel dwarfed by the catacomb-like, concrete walls that surround you and the massive, arching ceiling that disappears into darkness for half-a-mile in front of you. A dark canal of water lies motionless at your feet, its true depth veiled by the insufficient glow of the florescent lamps and the conspicuous absence of any natural light, as a breeze from a nearby fan gives the air an eerie coolness. Stretching across the abyss, a shining, steel, roller-tracked platform begins to move slowly toward you, as the singing sound of steel wheels echoes against the stone-cold walls. But the rhythmic sounds of metal bearings meshing with steel rails is soon replaced by the smooth and unmistakable sound of a ship's bow cutting through the water. The ship may only be 40 feet long, but at David Taylor everything moves, performs, responds and – with a little imagination – even sounds like the real thing.

Carderock Division and its staff of 4,000 scientists, engineers, and model makers builds and tests ship, sub and torpedo models. Their technical expertise spans 40 different marine- and defense-related disciplines including hydrodynamics, acoustics, machinery, aerodynamics, materials, logistics, physics, structures, mathematics, and in-service engineering.

David Taylor's main building is 3,200 feet long and houses two parallel basins filled with more than 30 million gallons of fresh water. The basins can accommodate up to a 40-foot-long model. The "tunnel" is kept dark to prevent mold and algae from growing in the water and on the walls.

The basin is named in honor of the late RADM David W. Taylor, a former chief constructor of the Navy. Taylor helped build the first experimental model basin at the Washington Navy Yard in 1898. When the Navy needed a larger, more advanced testing facility, the basin's current location was selected in 1936 because of its minimal seismic activity.

"This facility is the largest test facility in the world," said Dominic S. Cusanelli, a naval architect and test engineer at David Taylor. "There is only one place comparable to us, the Krylov Institute in St. Petersburg, Russia."

"Every major ship design came through here," continued Cusanelli. "Both the hull and propeller design are done here. We make models the size of pleasure craft. But some of our models are even larger."

"We will build anything," explained John R. Furlow, wood/composite model shop supervisor, "but usually we deal in 1/20 scale models. We can build a model out of wood, fiberglass – or whatever is needed. A model can cost anywhere from $40,000 to $400,000 and take about six to seven weeks to build.

"We have built submarines and surface ships. Everything the Navy has afloat – we have in a scale model. We make sure the ship is correct and conforms to what its supposed to do at sea, so there is no guessing."

Whether it's making a computer-assisted design, carving out a model or analyzing the test data after a run, the folks at the model test basin are exacting.

The testing performed at David Taylor is controlled by towing carriages that move along metal rails. These rails are built directly into the bedrock and even follow the curvature of the earth. "When they put the model in the water it's like putting it in the ocean," said Furlow. "You get the exact same data."

NSWC photo

A laser measurement test is done on a surface ship model attached to the towing carriage inside the David Taylor Model Basin.

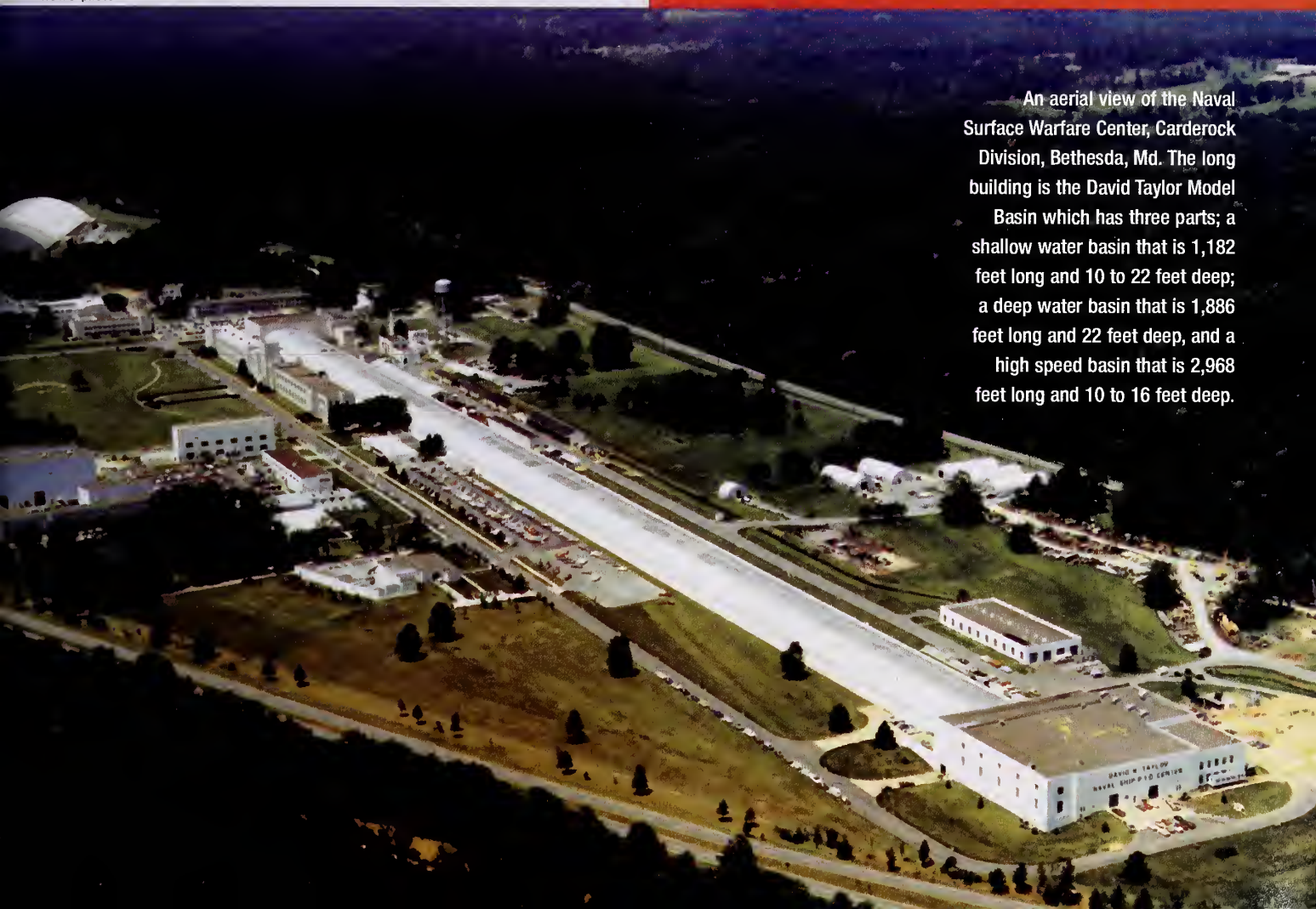


NSWC photo

Testing the hydrodynamics of a surface ship model's hull.



NSWC photo



An aerial view of the Naval Surface Warfare Center, Carderock Division, Bethesda, Md. The long building is the David Taylor Model Basin which has three parts; a shallow water basin that is 1,182 feet long and 10 to 22 feet deep; a deep water basin that is 1,886 feet long and 22 feet deep, and a high speed basin that is 2,968 feet long and 10 to 16 feet deep.

The inside view of the wood/composite model shop at NSWC Carderock Division. The eight-person shop can make a model out of wood, fiberglass or composite materials in six to seven weeks.

Photo by S. Gottlieb

The carriage tows the model through the water allowing it to pitch and roll as the model prop spins.

Instrumentation attached to both the model and the carriage allows engineers to evaluate every aspect of a design's performance – from hull resistance and speed calibrations to broken ice and towed body experiments.

David Taylor has five towing carriages. Each is powered by electric motors and the fastest can reach speeds up to 60 mph.

Basins at Carderock can even make their own waves in order to determine the effect of sea conditions on proposed designs. They have been used by the maritime shipping industry, fishing industry, oceanographic community and even a few America's Cup yacht racing syndicates.

The Carderock Division also has a series of smaller basins, cavitation water tunnels, and a circulating water channel.

By incorporating cutting-edge technology, Carderock continues to push Navy innovation forward – as evidenced by its 203 U.S.-approved patents since 1993.

Some of these innovations include: the DDG 51 and SSN 21 hull designs, ADM David Taylor's bulbous bow, shipboard plastic processors, USS *Arthur W. Radford's* (DDG 968) new composite mast and numerous advanced propeller designs.

"It's all about keeping the fleet strong and safe," said Jim R. Rice, an electronics engineer at Carderock. "It's about staying one step ahead of whatever threat is out there. It all has to start here with (testing), an idea and a design."

Allen is a photojournalist assigned to All Hands.

Harry Prince, a Welding Technician at the Davd Taylor R&D Center in Carderock, Md., welds a HYAD 2-inch steel plate for testing specimens with the GNAW Semi-Automatic Welding System.



Photo by PH3 Lena Gonzalez

Another basin at Carderock is the Harold E. Saunders Maneuvering & Seakeeping Basin, which is used for measuring model motions, accelerations, control surface deflections, hull strains and wake characteristics.



NSWC photo

RACE FOR THE CUP

By Jim Scott

The America's Cup won't be sailed again until the year 2000, but some U.S. teams are already gearing up. Two of these teams, New York Yacht Club's (NYYC) *Young America* and St. Francis Yacht Club's *America One*, are designing state-of-the-art contenders by using the David Taylor Model Basin.

Bill Day, who as head of the Facilities Engineering and Operations Department coordinates and schedules the tank testing, said, "Hull form and appendages such as the keel and rudder must be characterized as a set to determine the best sailing conditions for a particular design. Large-scale models, approximately 25 feet in length, are required to assure flow similarity with the real yacht and to acquire the quality of data needed to develop a winning design. We have been conducting tank testing on America's Cup models since 1985 when David Taylor Model Basin worked with the *Heart of America* team in the campaign that was sailed in Perth, Australia."

"America's Cup technology is now so precise and the design competition so close that even subtle design innovations can provide the competitive edge," said John Marshall, president of NYYC. "Therefore, the methodology for testing design concepts must be that much more precise, with better repeatability and lower uncertainty in the results."



America's Cup yacht undergoes tank texting in the David Taylor Model Basin at the Naval Surface Warfare Center Carderock Division.

America One is using computer design coupled with physical testing in a wind tunnel and at the David Taylor Model Basin to determine the total hydrodynamic resistance of several 25-foot models. David Taylor provides the designers with valuable insight into air-water, free-surface interface. This is an important element of sailing performance that cannot be modeled in a wind tunnel.

Testing at David Taylor is expected to continue throughout 1998 as U.S. teams refine the designs that will sail in Auckland, New Zealand, and challenge the Royal New Zealand Yacht Squadron for the America's Cup in March 2000.

Scott is the public affairs officer for Naval Surface Warfare Center Carderock Division.

BY JO1 Robert Benson



According to Dr. John Sirmalis, technical director at NUWC, Newport, R.I., as many as four Mantas might someday be fully integrated into the design of a submarine, residing in recessed cavities on the outer hull – so as not to affect the sub's hydro – dynamic resistance.

Artist's conception provided by NUWC

His eyes were bloodshot, and his head hurt.

It had been days since Nuclear Physicist's Mate 1st Class Rek Tiberdon slept. His R&R on Saturn's 14th substation "Hawaiidine" had been terminated three days earlier when he received emergency recall orders instructing him to return to Earth and join his veta cyberfor-atom displacement-class sub in the Pacific Ocean.

And now, with the memories of leave fading fast and his body trying to catch up to a hyper-space, sub-galaxy transport, Tiberdon stood ready at his battlestation on the bridge of USS Las Vegas as it hovered motionless at 34,820 feet – just above the bottom of the Marianas trench – listening and waiting.

Tiberdon didn't catch much of the conversation on the docking bay, but from what he could piece together some rebel faction had gotten their hands on an old nuclear sub from the late-20th century and Vegas had been detailed to take them out.

"Nice to have you back, son."

Tiberdon recognized the voice on his headset.

"Thanks, Skipper," he replied.

"Sorry to pull you back off leave, Rek, but we've got a situation here and nobody knows the Manta better than you. You ready for some action?"

"You bet, sir. Let's see what this baby can do."

"Launch Manta One."

With lighting quickness Tiberdon completed the make-ready and pre-flight and sent the unmanned "weapon" on its way. Even though he'd done the same thing a hundred times, he could not help but be impressed once again as the lights of the manta ray-shaped drone disappeared into the blackness. So much technology wrapped up in such a small package, *he thought.* Stealth sail, noiseless propulsion, composite "smart" skin, onboard active and passive sonar, high-rate coms, full sized torps... this thing is awesome.

"Enemy target visualized," said the computer-generated voice over the speaker.

"I see it," replied Tiberdon as he griped the controls and stared intently at the night-vision monitor mounted on his console.

"Coming up on the target, Captain. Enemy sub in range – two kilometers."

"Drop her in quietly on the enemy's starboard hull and launch Manta Two."

"Aye, sir."

Within minutes the second drone was within striking distance on the enemy's port side.

"She's boxed in Skipper and she doesn't even know it."

"Prepare to fire torpedoes on my order."

"Captain of the enemy sub, you are currently being tracked by two Manta submarines. You have 30 seconds to comply with United Nations directive 3101.5 and surrender..."

"Captain, he's opening his outer doors."

"He doesn't even know what he's up against. Petty Officer Tiberdon take him out," came the order.

With a tinge of regret, Tiberdon coordinated the Mantas' firing solutions and simultaneously fired two torpedoes which converged on the enemy sub amidships and split her in half.

Tiberdon watched on the digital iod vidfeed as the once-great warrior sunk into the depths.

MANTA

It reads like a science fiction novel. But, if a man by the name of John Sirmalis has his way, it won't be fiction for much longer. Dr. Sirmalis is the technical director at the Naval Undersea Warfare Center in Newport, R.I., and he is currently developing the technology to build an unmanned, undersea vehicle capable of extending the eyes and ears of the Navy's submarine force.

Sirmalis believes the Manta will be deployed as standard equipment on board Navy submarines sometime early in the next century. Four of these Mantas would be fully integrated into the design of the submarine, residing in recessed cavities on the outer hull – so as not to affect the sub's hydrodynamic resistance.

With their speed and stealth, submarines are capable of surveying contingency situations and probing enemy defenses. Their ability to gather information while remaining undetected is limited only by the range of their electronic equipment and the environment in which they operate.

Manta would increase the submarine's observable area in four directions and provide added firepower to an already formidable weapon. In theory, a submarine captain could inflict critical damage without ever giving away the position of the mother sub.

It may be fantasy now, but the Manta is coming.

Benson is the assistant editor for All Hands.

By Mary Anne Cowell

Sonar and the Silent Killer



Graphic courtesy of NUWC

A sonar array is used to image the human coronary artery system

For more than 50 years, scientists and engineers at the Naval Undersea Warfare Center (NUWC) in Newport, R.I., have designed, developed and tested every sonar array used by the U.S. Navy's submarine force. However, a team of scientists led by Dr. Norman Owsley and Dr. Andrew Hull recently hit upon a new and innovative use for sonar, one which could save hundreds of thousands of lives.

Five hundred thousand Americans die annually from coronary artery disease (CAD). CAD has been dubbed the "silent killer" because as plaque builds on artery walls, restricting blood flow and oxygen supply to the heart, a fatal heart attack is sometimes its first – and last – symptom.

Owsley, Hull and their team of researchers are currently developing a device which will be able to diagnose CAD by measuring the sound energy created by turbulent blood flow in constricted arteries. This device will then translate the collected data into computer images that cardiologists can analyze in the same way they analyze an X-ray.

The idea for the device came about four years ago when scientists working in NUWC's Sonar Department discovered that as blood flows through a clogged artery it produces low-level sounds similar to the sounds produced by submarines as they move through the water.

Hull and Owsley believe they can use the same sonars used by submarines to detect restricted flow through human arteries. If successful, it could provide a non-invasive alternative to the current, high-cost CAD diagnostic procedure, the angiogram.

According to Hull, "[A sonar cardiac monitor] would require only a personal computer and a disposable sensor array. Because the test is based on sensing the sound energy within a person's body, the only object that would touch the patient is the disposable, lightweight, flexible sonar array. This non-invasive test would entail no health risk to the patient.

"The simplicity of the procedure would allow tests to be performed anywhere a personal computer can be used, making it possible for testing to be done in the home, in neighborhood

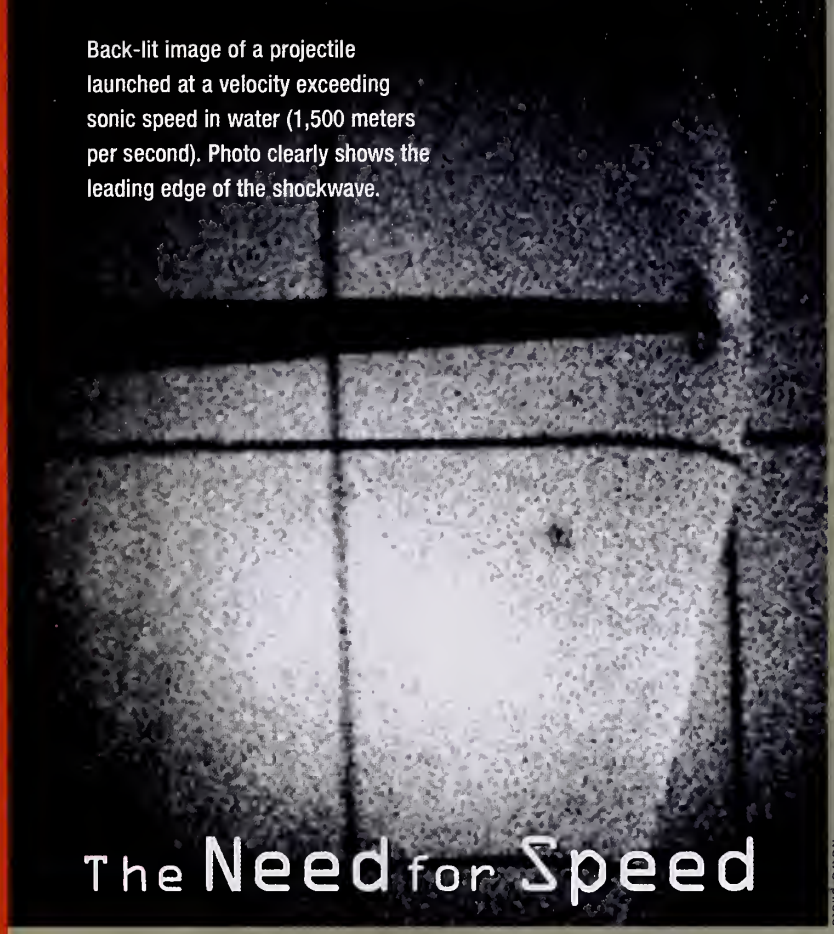
clinics, perhaps even in shopping malls, as is frequently done with public blood - pressure screenings."

This procedure could increase the odds of early diagnosis, giving patients the opportunity to treat their condition through diet and medication. The cost of such a procedure would also be hard to beat – one one-hundredth of an angiogram, which can run as high as $20,000.

Owsley and Hull have already designed three generations of sensors that detect low-level energy emissions in the human chest. They have also developed and verified methods to detect blockages in urethane molds that partially replicate the human body.

The implications of this research are simply tremendous. Not only could it lead to the accurate identification of blocked coronary arteries, but it could also provide diagnostic capabilities for aneurysms and other blood vessel diseases.

Cowell is a senior technical writer for the Naval Undersea Warfare Center, Newport, R.I.



Back-lit image of a projectile launched at a velocity exceeding sonic speed in water (1,500 meters per second). Photo clearly shows the leading edge of the shockwave.

NUWC photo

The Need for Speed

When Chuck Yeager broke the sound barrier flying the Bell X-1 in 1947, he ushered in new aviation age. This year, another speed barrier fell and another new age was begun when a group of scientists and engineers at the Naval Undersea Warfare Center (NUWC) in Newport, R.I., fired a specially-designed bullet that broke the speed of sound in water – approximately 1,500 meters per second.

The new record was reached as part of the center's study of supercavitation, a phenomenon in which the water near a projectile tip vaporizes, creating a cavity of low-density vapor. Simply put, the bullet, in this case, produced its own air pocket in which to fly.

Because underwater measurements and photography can be difficult, NUWC designed and built a unique test facility for research into the physics of supercavitation.

"It's hard enough to set up a high-speed test range capable of recording the motion of an object traveling at nearly one mile per second," said J. Dana Forbes, NUWC test director. "Now picture putting the range 15 to 20 feet underwater. Precise alignment of the gun and triggering of the waterproofed photography equipment and instrumentation is extremely important."

The NUWC team did not work alone to achieve their goal. Other contributors included General Dynamics Armament Systems, the Army Research Laboratory, Cornell University, Tracor and Cortana Corporation and Pennsylvania State University.

So, what does it all mean? While a sub-mounted weapons system is not on the drawing boards yet, the fact that we now know projectiles can achieve supersonic speeds underwater opens up a whole new realm of possibilities for undersea weapons of the future.

Compiled from information provided by Dr. Ivan Kirschner and the Naval Undersea Warfare Center, Newport, R.I.

THE BASE OF

The Smart Base project is one of several Navy initiatives designed to meet the challenges of a shrinking defense budget and reduced manpower. Like Smart Ship and Smart Card, Smart Base's mission is to explore new and innovative ways to make the Navy and its Sailors smarter, more efficient and better prepared to greet the next century.

The Smart Base team was tasked with designing a naval installation based on those innovative ideas. Here is what they came up with.



Streamlined

Sailors have **instant access** to Department of Defense and Navy directives through a desktop computer instead of having to drive to the local PSD.

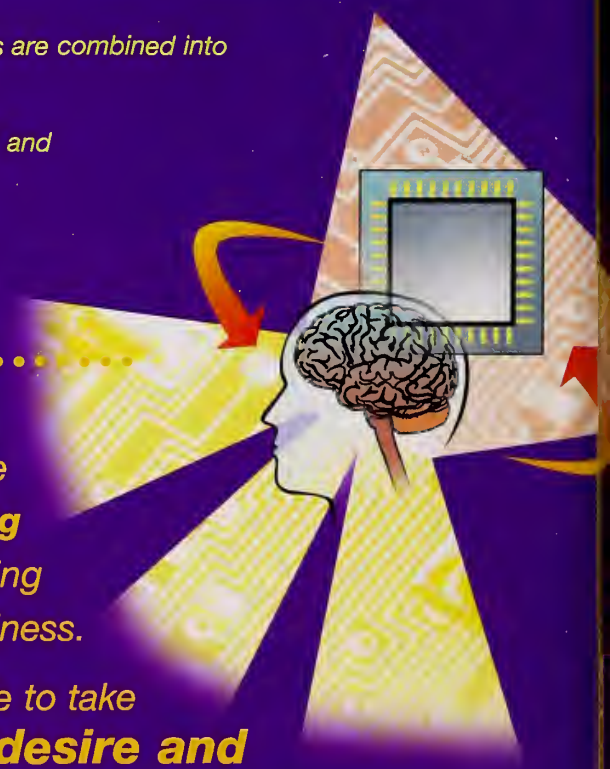
Smart Cards are used to store personnel information such as service, medical and dental records, PQS qualifications and security access. The card also serves as a room key for those Sailors staying at the BEQ.

Supply transactions are done **on-line.** Sailors get what they need faster, cheaper and with easier tracking capabilities.

On-base security, police, fire and emergency medical dispatches are combined into **one centralized console.**

Gate guards are replaced by electronic access control and **intruder detection systems.**

Smarter

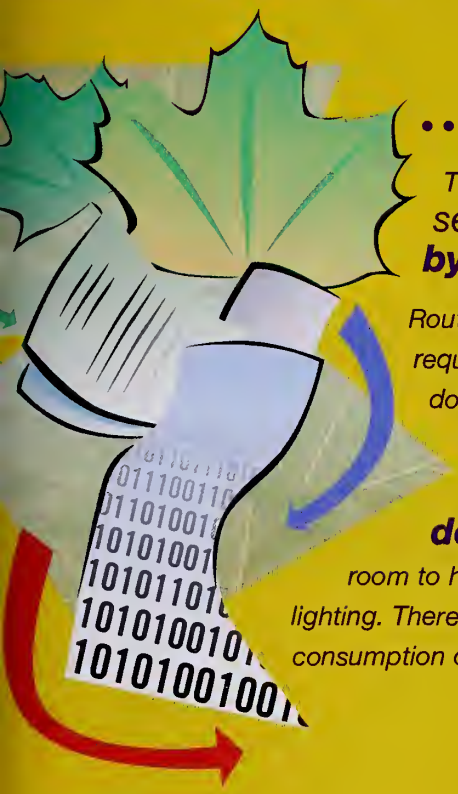


Using **Internet and VTC** (video teleconferencing) technologies, Sailors on shore duty have access to in-rate training courses -- **reducing command travel** and **TAD costs** and enhancing fleet readiness.

Sailors seeking **higher education** are able to take college courses on-line or via VTC. Sailors with the **desire and motivation** can even earn their doctorates.

THE FUTURE

Environmentally Conscious



The location and quantity of environmentally sensitive materials on base is **tracked by a database.**

Routine administrative functions like special request chits, leave papers and message traffic are all done **electronically** – drastically reducing the paper trail.

Energy-saving **"occupancy detectors"** are installed in every BEQ room to help control heating, air conditioning and lighting. There is a reduction in energy consumption of more than 30 percent.

For a more complete listing of Smart Base initiatives, visit their web site at **www.dt.navy.mil/smartbase.**

While not all of these initiatives will be implemented, the ones that are will change the way the Navy does business.



Centered on Sailors

Active-duty service members, family members and retirees living in **remote areas** where there is no local commissary are able to shop at commercial supermarkets at commissary prices.

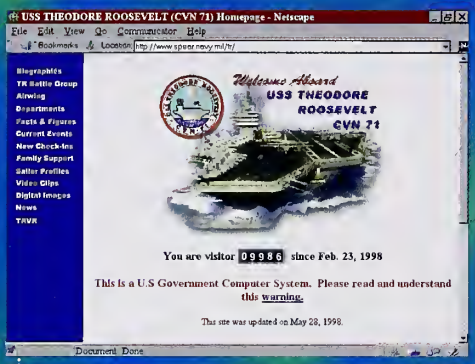
Morale, Welfare and Recreation (MWR) programs are enhanced by using **commercial software** to keep track of what MWR activities Sailors want.

A **"one-stop shopping"** web site – called the QOL Mall – is created to give Sailors information on hundreds of quality of life initiatives. By using the QOL Mall, Sailors can go on-line and find out about things like PCS moves; TRICARE benefits; on-base housing, child care and education facilities; and counseling services.

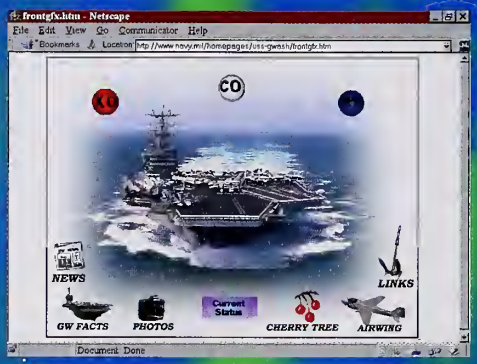
Information compiled by JO1 Jason Thompson, a photojournalist assigned to All Hands.

cybersailor@mediacen.navy.mil

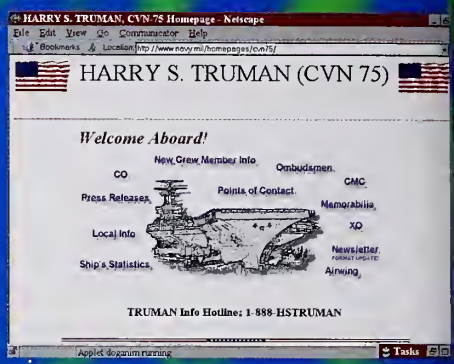
Cyber Sailor



USS *Theodore Roosevelt* (CVN 71) website



USS *George Washington* (CVN 73) website



USS *Harry S. Truman* (CVN 75) website

In last month's issue of *All Hands*, your dutiful cyber-servant (that's me) laboriously scanned hundreds of "small boy" web sites to find the few that were good enough to earn the coveted CyberSailor Site of Excellence (CSSOE) award. (Well, I don't know how coveted it is, but a guy can dream can't he?). So now that we've seen the best from amongst our frigates, destroyers and cruisers, let's see what the BIG BOYS have to offer – up next, the carriers.

The carriers get their own category. And why not? I mean, it would be unfair to compare every ship across the board, right? Let's face it, a ship with a crew of 300 (or less) is going to have a harder time finding talented web-volunteers than one with a *population* of close to 5,000. It just wouldn't be fair. I *expect* to find a better site when I cruise by a carrier's web port.

One tip before I start naming names. I found a site the other day that can really help all you junior web designers out there with some hard-and-fast rules about web design. The nuts and bolts, so to speak. Those pesky, little details that can make-or-break a homepage – items like browser compatibility, HTML coding, load time, broken links, spelling, etc.

Whether you're designing for yourself, your ship or some other group, try the Web Site Garage at **www.websitegarage.com.** This is a commercial site and some services, like periodic monitoring and search engine registration, you have to pay for, but it also offers "tune up" diagnostics which are free. I used the summaries for my review as an easy way to test, for example, load times (How fast will pages load at various modem speeds?) and browser compatibility (Will the page look the same on all browsers?).

All right, here are my selections for the prestigious (boy, am I full of myself, or what?) CSSOE award:

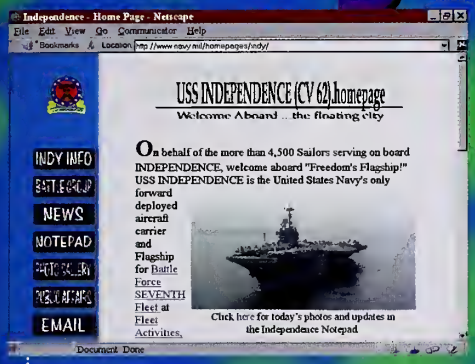
1. USS *Theodore Roosevelt* (CVN 71)
2. USS *George Washington* (CVN 73)
3. USS *Harry S. Truman* (CVN 75)
4. USS *Independence* (CV 62)

But, why? you scream. What about us? Well, let's take a look.

Starting with No. 4, *Indy's site* **(www.navy.mil/homepages/indy)** provides visitors with good information on the ship, the latest news on their deployment and a fantastic photo gallery (which is good for both incoming crewmembers and the general public – a public who wants to find out where their tax dollars are going). During the ship's deployment to the Arabian Gulf, updates have been posted about every other day, along with a good amount of new photos. It's a clean site with good links to find out about Yokosuka, the 7th Fleet and – most importantly – the Sailors on board.

Now, No. 3 had an unfair advantage. You see, Harry Truman is a hero of mine. So, I was slightly swayed from the outset, especially since USS *Harry S. Truman's* site **(www.navy.mil/homepages/cvn75)** gives visitors several pages devoted to the life and service of our 33rd President. Although the homepage is long (vertically, that is), most links you'll need are in the

And Now, the Big Boys...



USS *Independence* (CV 62) website

image map at the top of the page. Newcomer information, news from the Ombudsman and local area orientation are a few of the highlights.

The runner-up, USS *George Washington*, offers both a text-only version **(www.navy.mil/homepages/uss-gwash/fronttxt.htm)** and a graphic version **(www.navy.mil/homepages/ uss-gwash/frontgfx.htm)** – a nice choice for folks with slow modems. A feature called *The Cherry Tree* is operated during deployments to provide family and friends with information on the ship's activities and support resources.

And now, for the granddaddy of them all – the best of the best. My top pick among the carriers is USS *Theodore Roosevelt* **(www.spear.navy.mil/tr)**. I like a homepage that doesn't require me to scroll down to view everything. I also like one that doesn't go overboard with "bells and whistles" (animated graphics, javascripts, etc.) and doesn't make me wait. The *TR* team has put together an attractive and informative site, good for both the Sailor and non-Sailor.

So there you have it. My trusty assistants are busy at work designing a logo for the CSSOEs. Look for it soon. Whenever a site meets my rigid standards (I'll let you know what they are when I figure them out myself) it will be graced with the august privilege of displaying the CSSOE award.

Innovative Navy Sites

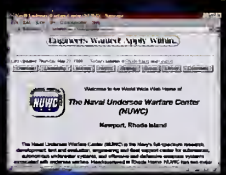
Innovation and the Navy go hand-in-hand. Anyone who has been aboard a modern warship, seen the cockpit of an F/A-18 *Hornet* or F-14 *Tomcat*, or looked at a photograph of a *Tomahawk* cruise missile in flight knows it.

Every day, Sailors and Navy researchers are working to make the Navy, the nation and the world a better – and safer – place to live. And some of what they're doing is on the web.

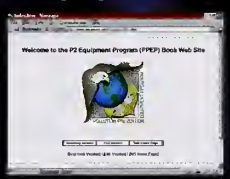


Let's start with the scientists and engineers creating tomorrow's Navy. First, there's Naval Surface Warfare Center's Carderock Division (www.dt.navy.mil). Celebrating 100 years of service, Carderock's site gives visitors a look at the facilities, as well as news of ongoing projects such as Smart Ship (www.dt.navy.mil/smartship). Likewise, the Naval Undersea Warfare Center's Newport Division (www.npt.nuwc.navy.mil) is your gateway into the Navy's research beneath the waves.





But innovation is more than people in lab coats peering into microscopes analyzing data. Sailors are called upon everyday to use the latest information and equipment to battle pollution and take care of our environment. The CNO's Environmental Protection Office (N45) sponsors the Pollution Prevention (P2) Equipment Program (www.lakehurst.navy.mil/p2/index.htm). At this site, as well as at the Navy Environmental Leadership Program site (www.nelp.navy.mil), Sailors can find out what the Navy is doing to make the Navy a cleaner and healthier place to work.



Innovation is all around us, and it is – as always – only just a click away.

Eye on the Fleet

EYE ON THE FLEET is a monthly photo feature sponsored by the Chief of Information Navy News Photo Division. We are looking for HIGH IMPACT, quality photography from SAILORS in the fleet, to showcase the American Sailor in ACTION.



FREE BIRD

A U.S. Navy helicopter from Light Helicopter Anti-Submarine Squadron 94 flies by the Statue of Liberty during the opening ceremonies of Fleet Week '98.
Photo by PH1 Pat Cashin.



JOINT PATROL

GM1(EOD) Kyle Wolf and 1st Sgt. Tuh Haw San, Republic of Singapore (EOD), establish runway security prior to clearance operations during TRICRAB '98. Photo by PH1 Pat Cashin.

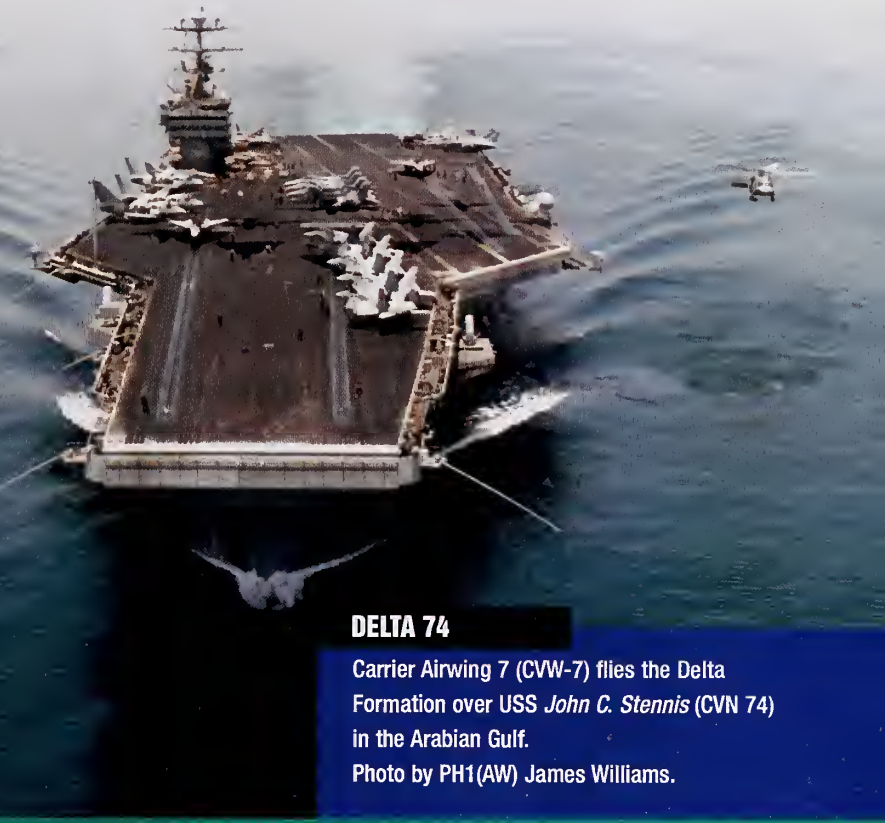




WHISTLE WHILE YOU WORK

BM3 Benard Hawkins pipes the arrival of a distinguished visitor on board USS *John C. Stennis* (CVN 74). Photo by PH1(AW) James Williams.





DELTA 74

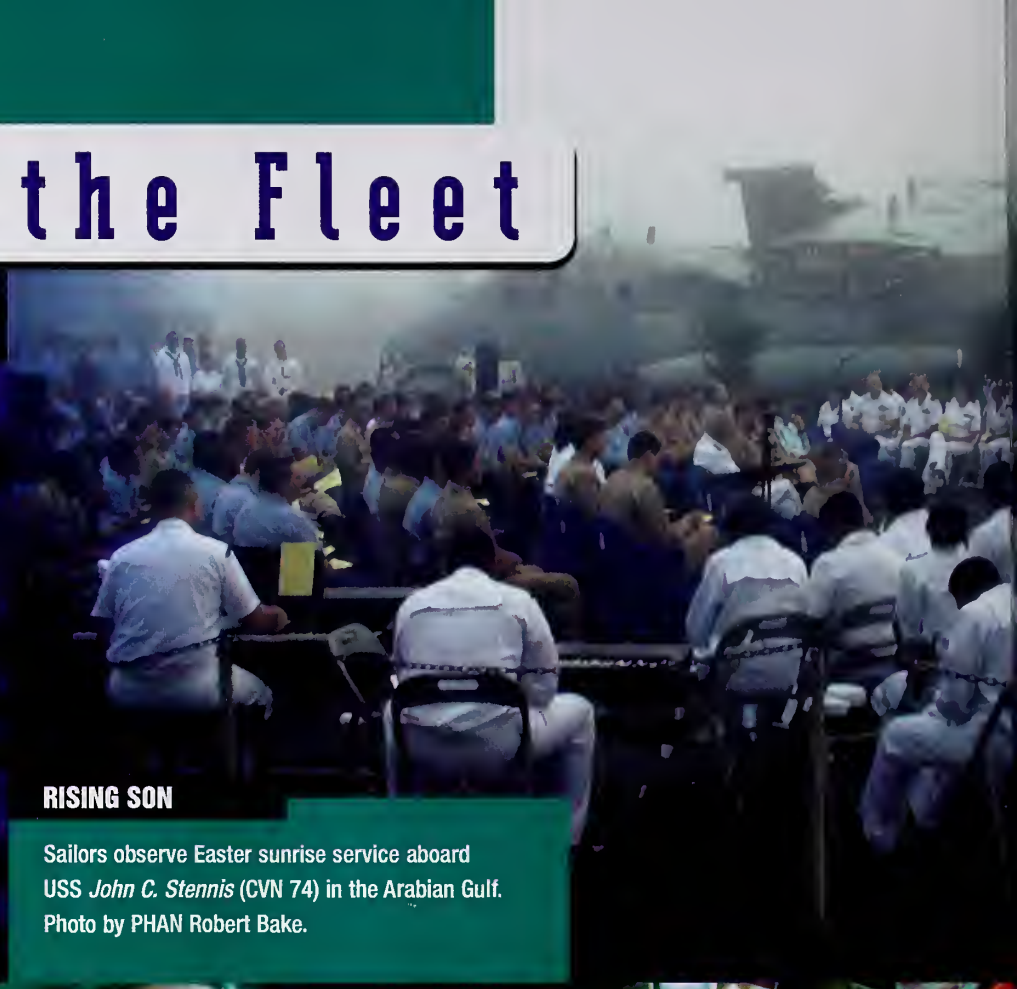
Carrier Airwing 7 (CVW-7) flies the Delta Formation over USS *John C. Stennis* (CVN 74) in the Arabian Gulf. Photo by PH1(AW) James Williams.

To be considered, forward your images with full credit and cutline information, including: full name, rank and duty station. Name all identifiable people within the photo and include important information about what is happening, where the photo was taken and the date.

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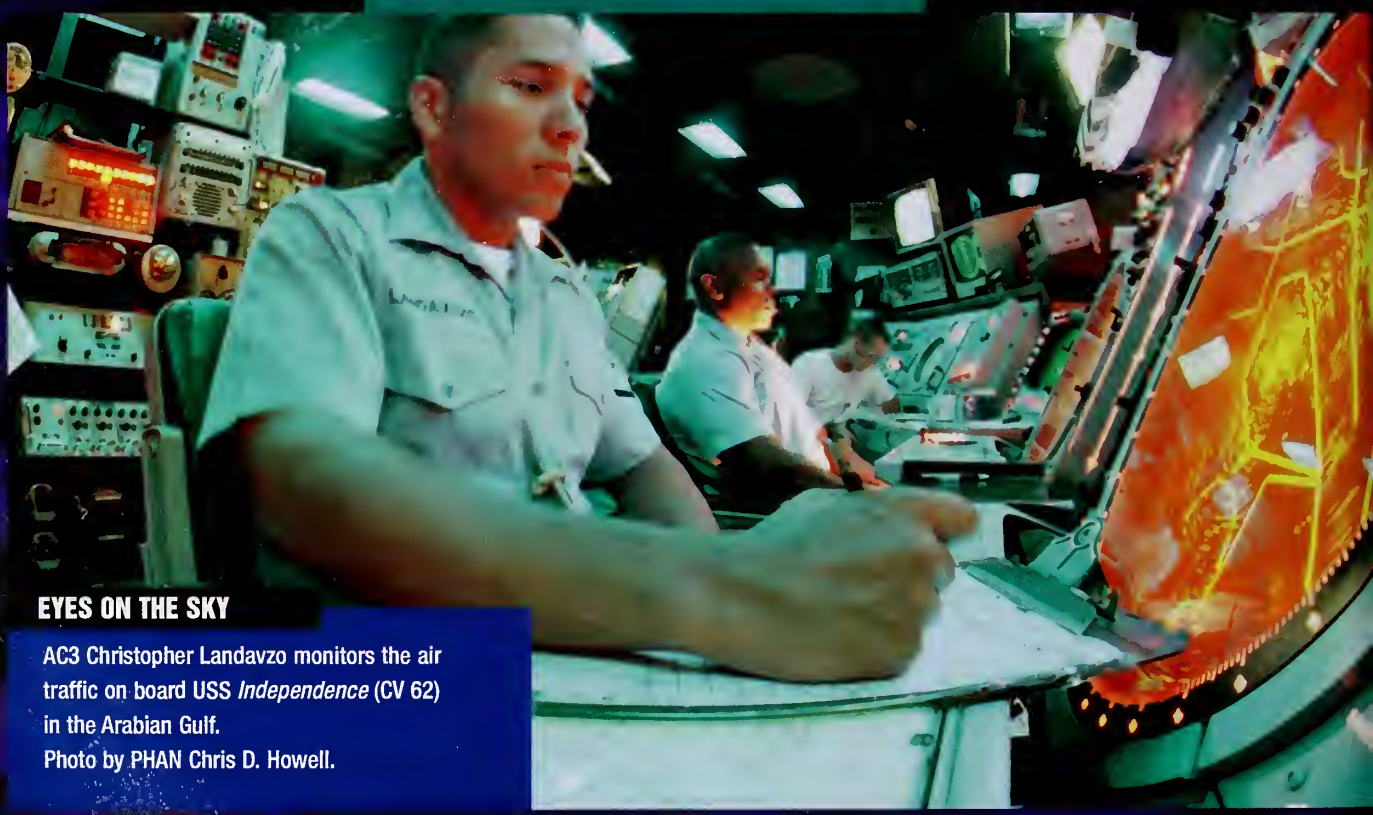
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Eye on the Fleet



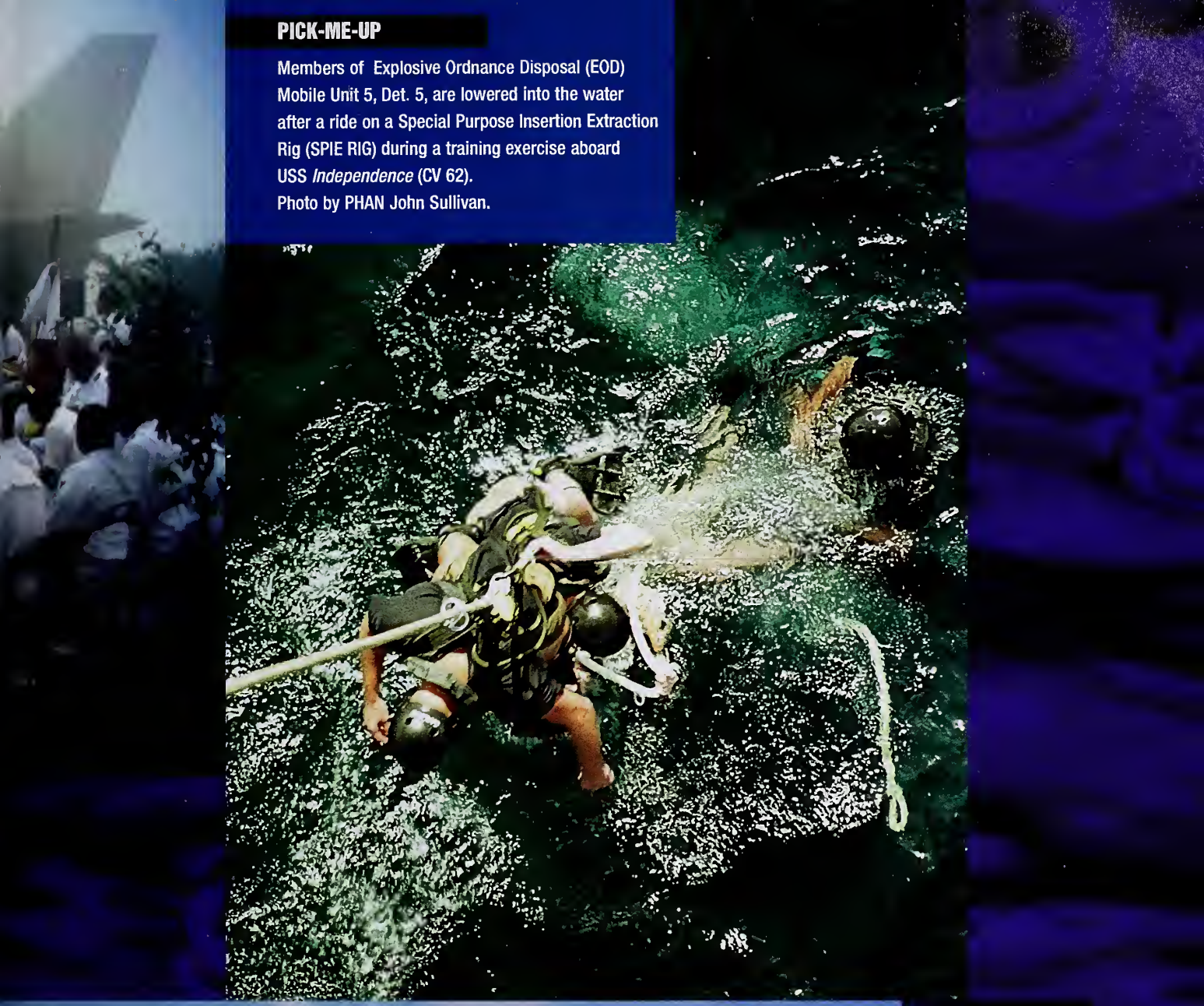
RISING SON

Sailors observe Easter sunrise service aboard USS *John C. Stennis* (CVN 74) in the Arabian Gulf.
Photo by PHAN Robert Bake.



EYES ON THE SKY

AC3 Christopher Landavzo monitors the air traffic on board USS *Independence* (CV 62) in the Arabian Gulf.
Photo by PHAN Chris D. Howell.



PICK-ME-UP

Members of Explosive Ordnance Disposal (EOD) Mobile Unit 5, Det. 5, are lowered into the water after a ride on a Special Purpose Insertion Extraction Rig (SPIE RIG) during a training exercise aboard USS *Independence* (CV 62).
Photo by PHAN John Sullivan.



FILL 'ER UP

USNS *Guadalupe* (TAO 200) transfers fuel to USS *John C. Stennis* (CVN 74) during an underway replenishment.
Photo by PH3 Kevin Tidwell.

Shipmates



Yeoman 1st Class (SS) **Scott Trojahn**
was selected as the Navy League's 1997 Service Person of the Year for Southeastern Connecticut. Trojahn, assigned to Personnel Support Activity Detachment New London, is a coordinator and tutor for after school programs with a local elementary school, a den leader for the Cub Scouts and a coach for Little League baseball and youth football leagues.



Electronics Technician 3rd Class **Mia Calla Dionne Lee**
was selected as 1998 Naval Computer and Telecommunications Command Junior Sailor of the Year. Lee, assigned to NCTS Guam, works on mission-essential electronic communications equipment while also serving as her division's physical fitness coordinator, work group repair parts petty officer and fire marshall. She is also a member of the command's Auxiliary Security Force.



Aviation Structural Mechanic (Hydraulics) Chief
Efrain Lopez
was selected as the coach of the Puerto Rican National Racquetball Team. Lopez, assigned to Fighter Squadron TWO, NAS Oceana, Va., is also the first alternate to the team, recently placing third in a coaches' competition. The eight-member national team has already qualified for one of the 10 spots in the 1999 Pan-American games.



Aviation Electronics Technician 2nd Class (AW)
Brian Baldwin
was selected for the Enlisted Commissioning Program – a program designed to allow highly-qualified Sailors without baccalaureate degrees the opportunity to earn commissions as naval officers. Baldwin, assigned to Electronic Attack Squadron 131, will attend the University of Colorado's College of Arts and Sciences, Boulder, Colo.



Storekeeper 2nd Class (SW) **Katherine Daigle**
was named USS *Simon Lake's* (AS 33) 1997 Junior Sailor of the Year. Daigle, a native of Lewiston, Maine, is the weapons department administration leading petty officer and senior watch office assistant. She is also her department's pass liaison representative, repair parts petty officer and women-at-sea representative.



Dental Technician 1st Class (FMF) **Victor M. Favela**
was selected as 1997 Sailor of the Year for Naval Medical Logistics Command, Fort Detrick, Md. Favela served as the Defense Acquisition Career Enhancement Program Coordinator, ensuring more than 250 federal employees and military officers were fully trained and certified to contract equipment and supplies for Navy medicine. He also volunteers as a tutor for the Adopt-A-School Program.

Did you know?



Robert D. Stethem
1961 – 1985

USS *Stethem* (DDG 63) is named in honor of SW2(DV) Robert Dean Stethem who was killed by terrorists on June 14, 1985, while returning from an assignment in Greece on TWA Flight 847. He was posthumously awarded the Purple Heart in 1985 and the Bronze Star in 1986.

USS *David R. Ray* (DD 971) is named in honor of HM2 David R. Ray who was awarded the Medal of Honor posthumously for his actions in Vietnam. On March 19, 1969, Ray treated wounded Marines during an intense enemy attack while defending his unit's position. Although severely wounded himself, Ray continued to provide aid until he ran out of ammunition and was killed.



USS *The Sullivans* (DDG 68) is named in honor of five brothers – Joseph, Francis, Albert, Madison and George Sullivan – who were lost at sea when their ship, USS *Juneau* (CL 52) was torpedoed by a Japanese submarine during the Battle of Guadalcanal. The brothers had petitioned the Navy to be stationed on the same ship after a family friend was killed during the Japanese attack on Pearl Harbor.

USS *Anzio* (CG 68) is named for the The Battle of Anzio which began the Allies' liberation of Italy in June 1944. Twenty-two Medals of Honor were awarded to American servicemen for their heroic actions in this pivotal confrontation.

The Future



The Naval Surface Warfare Center's Carderock Division

has a vision – to design and build a faster, stronger,

better-equipped, more-capable Navy. Innovation is what they

do best. From experimenting with composite materials to

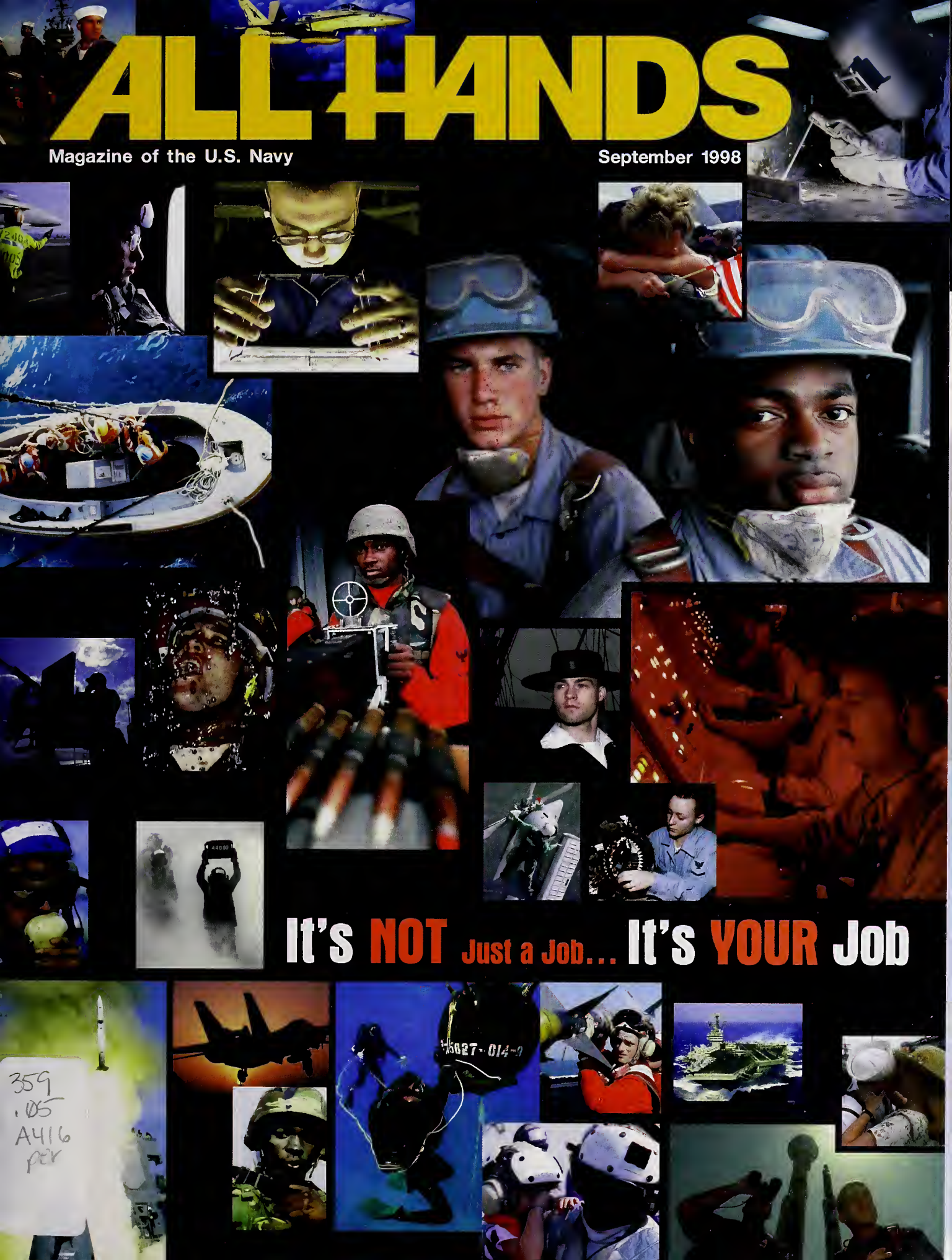
testing radical new hull designs, Carderock has pushed

the envelope in naval science and technology for more

than 100 years. It all starts with an idea.

is being designed Today


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September 1998
It's NOT Just a Job... It's YOUR Job

ALL HANDS
Number 9
September

Features

12 **The Earle of New Jersey**
Located 47 miles south of New York City, Navy Ammunition Depot, Earle can keep Sailors close to the diverse cultural and recreational activities of a big city while providing the security and seclusion of a small town.

14 **Diving into History**
Sailors from Naval Amphibious Base Little Creek's Mobile Diving and Salvage Unit 2 come face to face with a living ghost as they dive on the Civil War ironclad USS *Monitor* off the coast of North Carolina.

18 **More than a Passing Shadow**
Master Chief Petty Officer of the Navy Jim Herdt moves fast. Follow him for a day – a typical day... with an untypical man... in the "best damn Navy in the world."

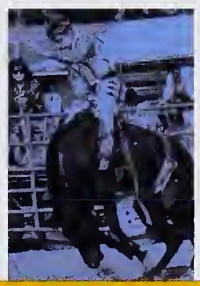


Photo by David Mudd

28

24 **Sailors of the Year**
Meet the four men selected as Atlantic Fleet, Pacific Fleet, Reserve and Shore Sailor of the Year for 1998.

28 **Drive South**
BUPERS has moved! At this very moment the last of the moving trucks are rolling into Millington, Tenn., depositing detailers and their families amidst the hospitality of a small town and on the verge of a new beginning.



ALL HANDS

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ADM Jay L. Johnson

Chief of Information
RADM Thomas Jurkowsky

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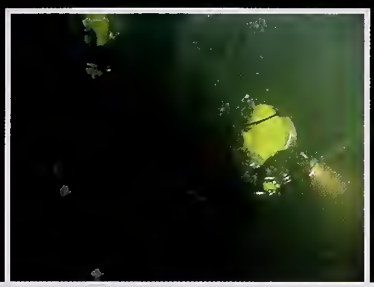
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Photos by D. J. Reller

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30 Welcome to Millington
Located 15 miles from Memphis along U.S. Highway 51 in northern Shelby County, Millington's down home hospitality and centered sense of community earned it the distinction of being named "Flag City, Tennessee."

32 Small Errors Can Cost You Big Time
Don't let a small mistake cost you a chance at advancement. Learn to ask the right questions.

34 Making the Right Moves
Getting ready to transfer? Know what to do and when to do it.

36 Moving On
Twenty years of service and you're moving on – embarking on that second career while enjoying the benefits of the first.

38 Interconnectivity
Detailers can reach out and touch anyone, anywhere in the world. They keep the Navy ready to fight by keeping the right people in the right places – all the time.

PERIODICAL

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www.chinfo.navy.mil/navpalib/allhands/ah-top.html

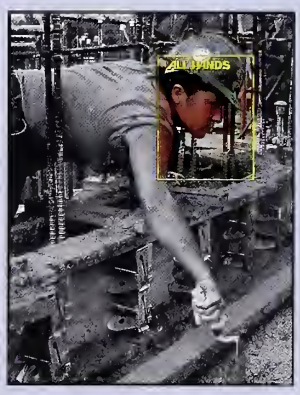
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On the Cover

Photos provided by Chief of Information Navy News Photo Division.

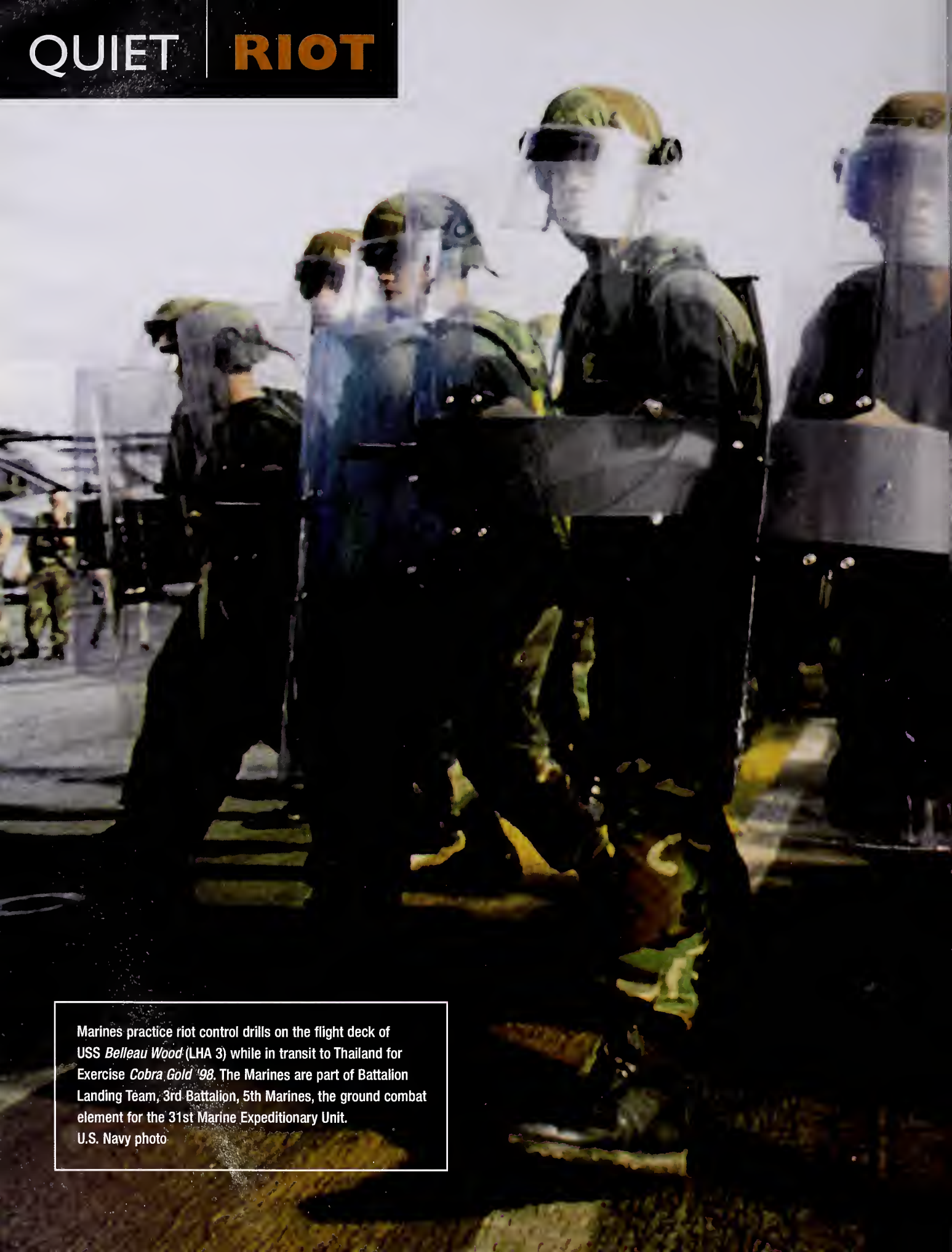


On the Back Cover

Yansell M. Gonzalez, from Puerto Rico, attached to Naval Mobile Construction Battalion 3, smoothes concrete for a vehicle storage project at the Naval Magazine, Guam.

Photo by PH2 Kelton L. Washington

QUIET | RIOT



Marines practice riot control drills on the flight deck of USS *Belleau Wood* (LHA 3) while in transit to Thailand for Exercise *Cobra Gold '98*. The Marines are part of Battalion Landing Team, 3rd Battalion, 5th Marines, the ground combat element for the 31st Marine Expeditionary Unit.
U.S. Navy photo



DOUBLE VISION





ETSN Dennis Standish (left) and LTJG Jeremy Shook search for surface ships with periscopes aboard the *Los Angeles*-class, fast-attack submarine USS *Tucson* (SSN 770). Photo by PH2 Jeffery S. Viano

Letters

Give and Take

This is just a note to tell you of a problem I spotted in your June issue of *All Hands*. On Page 16, you have an inset picture of a corpsman with a vaccutainer and needle set up.

This is for drawing blood and not for what the cutline states as "...prepares the proper dosage of medication for injection."

This is a "take" apparatus/set-up, not a "give." Thanks for a great laugh.

HM3 Martin E. Brown
Aviation Medicine, Base Medical Clinic
Millington, Tenn.

Bravo Zulu

As a Marine (1940-1946), and in the Navy (1947-1960), I want to commend you on your June 1998 issue of *All Hands* regarding the U.S. Navy Hospital Corps. It contained more information on so few pages than any other article I have read on one subject.

And, of course, the other subjects in this issue of *All Hands* were great. But my main interest was "Hospital Corpsmen." We can not do without them.

ADRC Olin V. Mapes, (Ret.)
Jacksonville, Fla.

"A Splendid Little War"

The articles about the Spanish-American War were excellent. This period of time has always fascinated me. Ironically, this most noteworthy era and the events which brought us from a less than second-rate nation to world prominence, seems to get little attention from the historians, in spite of the conflict being considered "a splendid little war."

What disappointed me was the briefness of the article about Chief Gunner's Mate Dick Turpin. If my sources of information are correct, he was the first African-American CPO in the U.S. Navy.

In addition to this not so insignificant achievement, Turpin returned to active, though limited, duty during World War II and was well-received when he spoke at training commands. While on active duty, he was a master diver (note the designation on the left sleeve of his service dress blue coat).

Those of us who have heard of GMC Turpin would be interested in more information about this man. ...The resulting story would, I'm sure, be worth telling.

PC1 P.J. McKenna
Naval Hospital, Jacksonville, Fla.

YNCS Mary Jo Cervantes, USNR, during her annual training at Naval Air Weapons Station Point Mugu, Calif.



Photo by PH2 Edward P. Berard

One Navy

In your listing of "Shipmates" on page 48 of the July 98 issue you profiled Mary Jo Cervantes of NAVAIRES Point Mugu. Unfortunately, you failed to mention that she is a YNCS in the Naval Reserve and ha been a key component of VP-65 and their consecutive winning of the COMRES-PATWINGPAC Admin Excellence award.

In keeping with the concept of "one Navy," active and reserves, it is important to let our active-duty Sailors know what type of talent resides in our Naval Reservists. I hope you will be able to recognize Senior Chief Cervantes in an upcoming issue of *All Hands*. I can assure you that ALL drilling Naval Reservists read your publication to keep abreast of the state of the active-duty Navy. It is a valuable tool for readiness. Thank You.

CDR Randal D. Farley, USNI
VP-65, Point Mugu, Calif

Tell us something we don't know.

Send your comments to: *All Hands*, Naval Media Center, Bldg. 168, NAVSTA Anacostia (ATTN: Editor), 2701 S. Capitol St. S.W., Washington, D.C. 20373-5819

or e-mail: allhands@mediacen.navy.mil



The Navy's Recruiting force is looking for hundreds of energetic, hard-charging, shore duty-eligible E-4s to volunteer for recruiting duty.

Learn valuable skills such as marketing, sales and public speaking.

Third class petty officers on recruiting duty will receive the same training and be eligible for the same benefits and opportunities as their more senior shipmates, including the ability to compete for meritorious advancement.

"From my experience in recruiting, exceptional third class petty officers will be a tremendous addition to the Navy Recruiting team," said Master Chief Machinist's Mate (SS) Steve Holton, Navy Recruiting Force Master Chief. "These Sailors can easily relate to our target market – 17- to 21-year-old men and women."

Interested Sailors should contact Navy Recruiting Command's Recruiter Selection Team at (703) 696-4076 or DSN 426-4076 or via e-mail at **1131@hq.nrc.navy.mil.**

For more information about Navy recruiting, visit the following websites.

Navy Recruiting Command: **www.nrc.navy.mil**

Navy Jobs: **www.navyjobs.com**

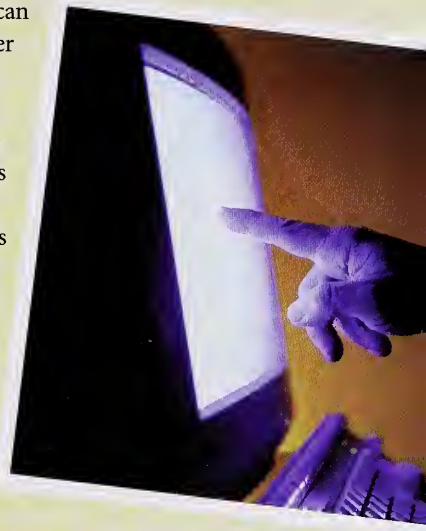
Information provided by Navy Recruiting Command Public Affairs.

All That JASS

The Job Advertisement and Selection System (JASS) is now available to the entire fleet. JASS is an interactive, on-line information system Sailors can access via their Command Career Counselor to electronically apply for up to five jobs from the enlisted requisition list. With JASS, qualified Sailors have an equal opportunity to be considered for a particular job, detailers can ensure the best match is made for any particular job, and Sailors don't have to queue up on phone lines to find out what jobs are available because JASS is the actual requisition list detailers use to do their jobs.

It works like this. During the first week of the requisition, JASS is open for applications. Sailors within nine months of their Projected Rotation Date (PRD) can sit down with their Command Career Counselor and put their names against five jobs they are qualified to fill.

Don't worry if you are unable to make applications until Friday of the first week because detailers will not begin to make selections until the second week of the requisition cycle. If, due to technical problems or insufficient hardware, a command is unable to log on to JASS, Sailors and their Command Career Counselors can call their detailers who will enter their applications.



At the beginning of the second week, detailers close the requisition for new applications and begin processing all the applications received. Selections are made based on many factors, including:

- The needs of the Navy, to include available PCS funds, hot fills and operational commitments.
- The Sailor's qualifications for the job, such as PRD, pay grade and NEC.
- The Sailor's desires, as noted on their applications.

Command Career Counselors can monitor the process and inform applicants of any selections that are made. Most selections are made by Wednesday of the selection week and Sailors can normally expect orders within four to eight weeks.

For more information, contact your Command Career Counselor or call the JASS Help Desk at 1-800-537-4617 (DSN: 678-7070) or email: **helpdesk@cnrf.nola.navy.mil.**

Information compiled by JO1 Jason Thompson, All Hands.

Golden Anchor Six-peat

While the Chicago Bulls were chasing their sixth NBA Championship of the 1990s, USS *Samuel B. Roberts* (FFG 58) was building a dynasty of its own. Through strong mentoring programs and an unparalleled commitment to the professional development of her crew, "*Sammy B.*" earned her sixth consecutive Golden Anchor Award for retention.

According to *Roberts*' Command Career Counselor, Sonar Technician Chief (SW) Sol Fletcherel, "*Sammy B.* has always been a special ship and has taken an aggressive approach to combating attrition, especially among first-termers and GENDETS (non-rated seamen and firemen). Whether through obtaining a slot at "A" school or pursuing a special program, helping the individual find his niche usually benefits the individual and the Navy."

Fletcherel has found that Sailors who have a plan are more likely to consider the Navy for a long-term career.

"*Sammy B.* helped me get where I wanted to go," said Operations Specialist 2nd Class (SW) John Hansen. Hansen, who qualified as an Enlisted Surface Warfare Specialist during a deployment to the Arabian Gulf, will be heading to recruiting duty near his hometown of Greenville, Mich.

Fire Controlman 2nd Class Gregory Crump agreed. "Chief Fletcherel really went out of his way to help me with my BOOST package." Crump will be reporting to BOOST (Broadened Opportunity for Officer Selection and Training) in Newport, R.I., later this summer with the ultimate goal of obtaining a college degree and a commission.

Retention is a team effort on *Roberts*, from divisional career counselors to shipmates who have "been there" and are willing to lend their experience to Sailors making career choices. "The quartermasters have really taken me under their wing," said Seaman Demetrous Johnson of Del Norte, Colo., who plans to take the third class exam this fall.

Samuel B. Robert's Commanding Officer Christopher M. Wode summed it up best, "The Sailors we train today will be the leaders and surface warriors of the 21st century."

Story by LTJG Kevin A. Lane, USS Samuel B. Roberts *(FFG 58).*

Postcard From the Fleet



Name: Electronics Technician 1st Class (SW) Kathleen M. Padilla

Command: USS *La Salle* (AGF 3)

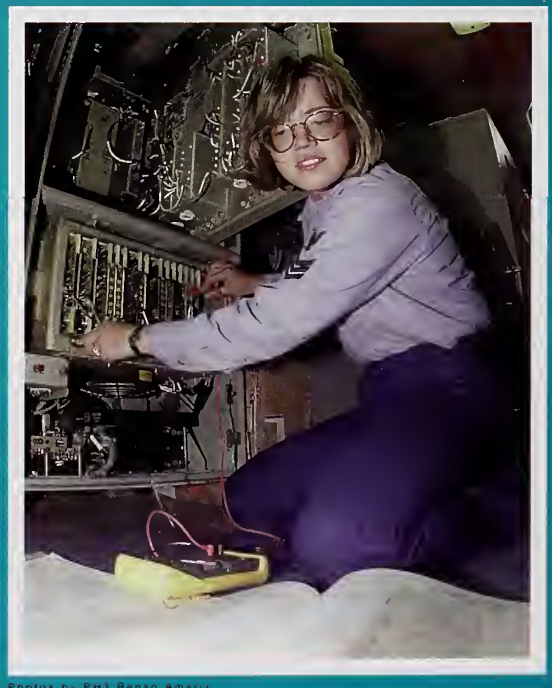
Hometown: New Hartford, Conn.

Favorite Duty Station: Instructor at ET "A" School, Great Lakes, Ill.

Favorite Quote: "Be careful what you wish for. You may get it."

Goals: "Be the best I can be wherever the Navy takes me. Eventually to retire from the Navy with my husband, Frank."

Keys to Success: "Always respect and have pride in yourself and in the job you do. Be the example and lead the way."



Photos by PH3 Renso Amaris

A Cut Above



It's time for a change, he thought as he whisked his pen across the page and endorsed the plan to replace the denim, dungaree trousers and chambray shirts with a newly-designed 65% polyester/35% cotton blend.

Gone are the patch pockets and bell-bottoms – the new cut matching that of the working khaki uniform worn by officers and chiefs.

The color remains unchanged – dark blue pants and light blue shirt. Machine washable, wrinkle resistant and complete with military creases and embroidered nametags and patches, these new uniforms are durable – resistant to snags, pulls and runs.

They just may be the last uniform you ever buy. Not a bad way to start off the new millenium.



Simply Professional

He stood with his face to the wind on the bridge wing of a destroyer going 30 knots as he lifted the binoculars to look for contacts. The crisp, salt air cut sharply against his exposed features but bounced harmlessly off his full-length, Navy-blue, submarine-style coveralls.

A generous cut with room to move, insignias on the collar and names embroidered across the front, he had thrown them on in an instant when the general quarters alarm sounded. Now, he stood watching and waiting–a Sailor at sea.

Finding the Y2K Bug

Atlantic Fleet's Y2K office is attacking the Millennium Bug with full force. In addition to an aggressive awareness campaign, a website and a call-in help desk, they recently hosted a series of one-day training sessions to teach Navy commands how to accurately inventory all vulnerable systems and assess the degree to which they may be affected.

According to Atlantic Fleet's Y2K Action Officer, CDR Don Pacetti, "One of the most common misconceptions about Y2K is that it's just a computer/information technology problem. It isn't. It's much more than that. Anything that has a microprocessor in it is vulnerable. You have to know where the problems are before you can fix them."

The training sessions were designed to teach Y2K representatives how to search for potential problems. "Our goal is to develop an accurate inventory of Y2K discrepancies in mission critical systems so we can prioritize our renovation efforts and ensure our ships and shore stations maintain warfighting capability," said Pacetti.

For more information visit: www.cnsl.spear.navy.mil/y2k/y2khome.htm.

Information provided by U.S. Atlantic Fleet Public Affairs.

By Master Chief Petty Officer of the Navy MMCM(SS/SW/AW) Jim Herdt

Speaking with Sailors

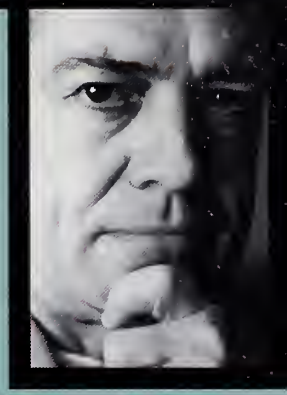


Photo by JO1 Robert Benson

During my visits with Sailors throughout the fleet, I often get asked about when advancements will improve. The answer is, they have been improving and continue to improve everyday.

Since the March 1997 cycle, E-4 quotas have risen 6 percent, E-5 quotas have risen 2 percent and E-6 quotas have more than doubled. The chief petty officer (CPO) board selected 331 more chiefs this year than they did last year. Also, in the most recent E-8/E-9 selection boards, senior chief quotas jumped up by 5 percent and master chief selections were up from 10 to approximately 14 percent. The good news is that we not only expect to sustain these gains but we anticipate an increase as well.

Quotas are improving due to the fact that we are quickly approaching our authorized end strength – an end strength we were not supposed to reach until 2002. We are way ahead of schedule. At our current rate we will level off sometime next year, allowing for three years of unprecedented stability in our all-volunteer force.

Many Sailors forget that our advancement system is vacancy driven, especially Sailors who have joined the Navy in the past eight years. They have yet to experience the cyclic nature of a true, vacancy-driven system. Because of DOD's "rightsizing" initiatives, advancement quotas have been low. But, as we stabilize, quotas will continue to go up. There may still be a few depressed ratings and we are looking at what actions we can take to bring these ratings into line with the advancement opportunities of the majority.

My advice to Sailors is as it has always been. If you want to advance, work hard, study smart and be patient. In those ratings where advancement opportunity is depressed, Sailors might want to consider exploring the possibility of cross-rating.

I look forward to meeting each and every one of you and answering your questions in person during one of my many trips to the fleet. Keep up the good work.

Speaking with Sailors **is a new monthly column initiated by the Master Chief Petty Officer of the Navy as a way of reaching out to the men and women of the fleet, whether they are stationed just down the road or halfway around the world.**

Teen Web

Military teens have a new hangout on the World Wide Web, thanks to the Department of Defense's Office of Family Policy. *Military Teens on the Move* [http://dticaw.dtic.mil/mtom] caters to the teenagers of service members and Department of Defense civilian employees. It's a one-stop, interactive information source for young people seeking to connect with each other and learn more about military life – and themselves.



"*Military Teens on the Move* was designed to help teenagers moving to a new military installation," said Carolyn H. Becraft, deputy assistant defense secretary for personal support, families and education.

The site offers typical moving information and has links to military installation and school home pages. By clicking on a "News You Can Use" icon, teenagers can link to pages for homework help, volunteer opportunities and college information. Other links jump to pages on such subjects as substance abuse, HIV, dealing with parents and handling difficult situations.

The site dedicates an entire area to youth sponsorship programs, which pair relocating teens with a teen at the new installation who can answer questions, send information and maybe show them around once they arrive. The site also provides information on how to start and maintain teen sponsorship programs at bases that may not have them yet.

"*Military Teens on the Move* also features a monitored chat room and bulletin board to help teens keep in touch with each other – further enhancing local youth sponsorship efforts," Becraft said. "I hope that teens will find the site helpful and will want to volunteer to create and update pages for the site."

Military Teens on the Move is the latest in the Office of Family Policy's suite of websites on military assistance programs. The military assistance homepage can be accessed at **http://dticaw.dtic.mil/mapsite**. It links to the teen site and many others.

Story courtesy of American Forces Press Service.

House Call

Darrin and Darrel Cooper, 11-year-old twin brothers living in San Diego, are glued to the television almost every morning before school, but they are not watching cartoons. They are trying to keep their chronic asthma under control.

Every Monday, Wednesday and Friday morning, the boys call up nurse Nina Walker to report their lungs' performance (measured on a peak flow meter), inform her of any unusual symptoms and get advice on medication.



Walker has worked with the Cooper boys since March, when the Pediatric Asthma Tele-Case Management Project began. The project is sponsored by TRICARE Southern California, the office that oversees implementation of the military health plan and facilitates managed care throughout the region's military hospitals and clinics. Her main duties are to provide the children with day-to-day care and manage their medication and overall health.



Their mother, Data Processing Technician Second Class Umeki Yvette Cooper, has struggled to manage her sons' disease since they were three. Over the years, the boys have suffered dozens of asthma attacks, many of them requiring nerve-racking trips to hospital emergency rooms or intensive care units.

To further complicate matters, Cooper deployed aboard USS *Tarawa* (LHA 1) in February. Since then, the boys' grandmother, Carolyn Clark, has taken on the responsibility of caring for the boys at home. But according to Clark, the program makes caring for the youngsters much easier. It's like having a specialist in our home 24 hours a day," said Clark. "With this program, I'm just minutes away from help and I don't have to leave the house."

Currently, the Tele-Case Management project is serving six families throughout southern California. Each family has a small video camera and adapter box that converts the compressed video feed from a standard telephone line to a TV signal. The equipment is available at consumer electronic stores for about $500.

"Asthma is scary because you're dealing with literally seconds, not minutes or hours to respond," said Cooper in an e-mail message from on board *Tarawa*. "During an attack, you are constantly asking yourself the question, 'should I go to the emergency room or give another treatment?' This new technology gives me a nice warm and fuzzy feeling knowing that even though I am deployed, my mother is comfortable with the idea that there is someone just a phone call away. It keeps her from having to guess and keeps my family healthy while I'm away."

Story and photos provided by LT Rick Haupt, public affairs officer, TRICARE Region 9, San Diego.

10 Sections

USS *Barry* (DDG 52), homeported in Norfolk, will soon increase its in-port duty rotation to 10 sections, improving readiness and crew members' quality of life.

"The expansion from six to 10 duty sections will mean that our Sailors will get to spend the equivalent of an extra month at home during an inter-deployment cycle," calculated Master Chief Fire Controlman (SW) Dave Hales, *Barry's* enlisted watchbill coordinator.

"When we first started this project, we had reservations about the feasibility of 10-section duty," said *Barry's* senior watch officer LT Neale Ellis. "As the idea started to evolve, I think we were all surprised by just how straightforward its implementation would be. Part of the beauty of this plan is that a ship our size can do this without any outside assistance, new technology or additional money."

LCDR Michael Graham, *Barry's* executive officer, believes more than just quality of life will improve with this plan. "There are a number of hidden benefits generated by this push to increase the number of duty sections," he said. "Because it requires a more well-rounded duty section with crew members capable of wearing many different hats, the net result is a more qualified, professional crew who is better able to cope with contingencies."

Story by FCC(SW) John S. Prokop, USS Barry *(DDG 52).*

The underway replenishment detail on board USS *Barry* (DDG 52) stands ready as she comes alongside USS *George Washington* (CVN 73).



Photo by AN Joe Hendricks

The Earle of New Jersey

By JO2 Jeremy Allen

So you want to go where the action is – New York City, the Big Apple, the City that Never Sleeps. Times Square, Broadway, Madison Square Garden, Yankee Stadium, David Letterman, Lady Liberty – you want it all. But you don't want to deal with the traffic and congestion generated by 6 million people living in an area three miles long and only two miles wide. Well, the Navy has the perfect spot for you – the Navy Ammunition Depot (NAD), Earle, New Jersey.



U.S. Navy Photo

An aerial view of Earle's three-finger pier during the aftermath of the "Blizzard of '96."

Located 47 miles south of New York City, in Colts Neck Township, Monmouth County, NAD Earle gives Sailors the best of both worlds – allowing them to be close to the diverse cultural and recreational activities of a big city while providing the seclusion and security of a small town.

NAD Earle provides logistical, technical and materiel support to the fleet in a variety of areas ranging from combat subsystems and retail ammunition management to ordnance packaging, handling and storage.

The station – named after RADM Ralph Earle, the Chief of the Bureau of Ordnance during World War I – was opened in 1943 to help with the war effort. It is split into two locations with the principle entrance, called Mainside, connected to the waterfront site in Middletown by a 14-mile corridor and rail line.

The 10,000-acre Mainside houses most of the site's facilities as well as the state's third largest railroad – with 130 miles of track, seven locomotives and 340 railcars.

"Everything I heard about New Jersey was the crime and how dirty it was," said Hull Technician 1st Class Paul Abts, stationed at Shore Intermediate Maintenance Facility (SIMA) Earle, New Jersey. "But when I got here I was very surprised. This is just like where I grew up. The country is really nice."

The ordnance department uses the waterfront site to provide ammunition to nearly every ship in the Navy and the Coast Guard. The waterfront's pier complex is one of the longest "finger piers" in the world and is home to USS *Supply* (AOE 6), USS *Arctic* (AOE 8), Combat Logistics Group 2 and SIMA. Made up of a two-mile-long main trestle which connects to a three-finger pier, it gives Earle the capability to safely load and unload weapons from a variety of ships.

And for those who love to fish, the finger piers are hard to beat. "You can actually fish right on the pier," said Disbursing Clerk 2nd Class Kevin Boston, stationed aboard *Arctic*.

"This area of New Jersey is more like a resort town than a Navy base," said Radioman 3rd Class Horacio Robertson, also of *Arctic*. "There's plenty to do and it's close to two major cities."

So if you're in the metropolitan area, plan to visit Earle, New Jersey. You're going to like what you find. And besides, the fish are biting.

Allen is a photojournalist assigned to All Hands.



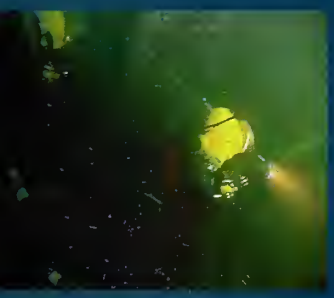
Photo by PH3 Lena Gonzalez

DK2 Kevin Boston, from Long Island, N.Y., runs out of the cool and refreshing ocean water toward the warm sands of Sandy Hook – just one of the many beaches located near Earle, N.J.

DIVING INTO

Salvage photos by D.J. Roller









GHOST SHIP

The once-formidable, Civil War ironclad USS *Monitor* now lies in 230 feet of water off the coast of North Carolina in an area known as the "Graveyard of the Atlantic."

By JO1 Robert Benson

Deep beneath the waves, in a dark, cold, unforgiving place called the "Graveyard of the Atlantic," lies a piece of American history. For 136 years the sunken, Civil War ironclad USS *Monitor* has been surrendering her secrets to the sea – quietly whispering tales of a time long ago when iron-hulled ships lit up the night sky with their cannons near Hampton Roads. No one heard those whispers – until now.

HISTORY



Historical photos courtesy of National Archives

Officers of USS *Monitor*, July 9, 1862

The Navy, in cooperation with the National Oceanic and Atmospheric Administration (NOAA), recently dove into the past as 30 Sailors from Naval Amphibious Base Little Creek's Mobile Diving and Salvage Unit (MDSU) 2 tried to stop the slow erosion of a piece of our naval heritage.

MDSU-2, the same unit that aided the TWA Flight 800 recovery effort after the jetliner crashed off the coast of Long Island, N.Y., spent three weeks in late May aboard the NOAA salvage ship *Kellie Chouest* about 15 miles south of Cape Hatteras, N.C. Working at a depth of 230 feet, the divers were tasked with obtaining hull and sediment samples – but they came back with so much more.

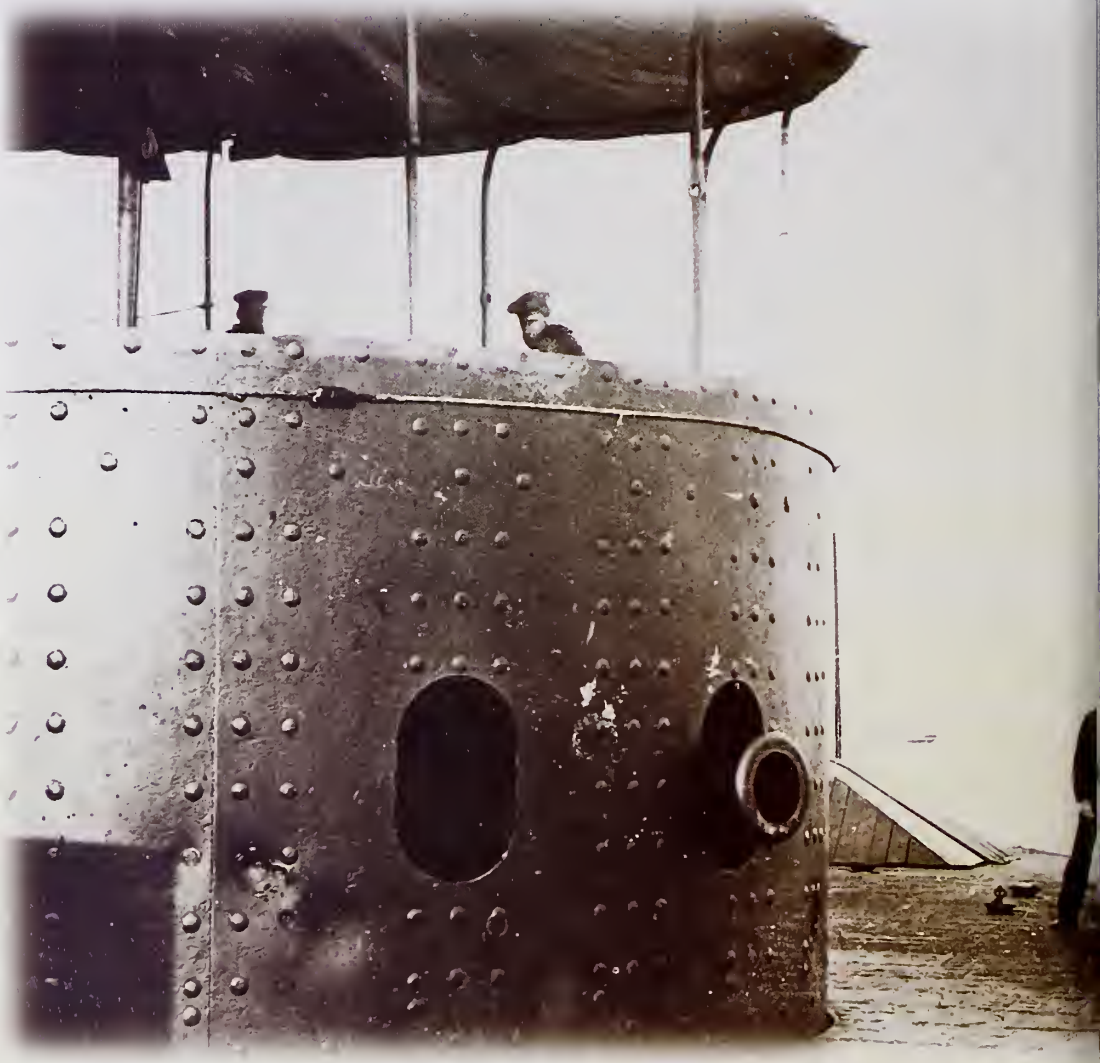
After two and a half weeks of difficult diving, made worse by heavy, unpredictable seas and strong, bottom currents, the divers breathed a sigh of pride and relief as the propeller and shaft were raised from the bottom. "NOAA didn't think we could do it," said Machinist's Mate 1st Class (SW/DV) Roger Riendeau. "They would've been happy with a survey of the wreck, and maybe some sediment samples. But we said all along that we were going to get the propeller and that's what we did."

MDSU-2 Sailors made 55 dives over the course of the salvage operation totaling close to 60 hours at depth. But the most demanding part of the operation was probably the hundreds upon hundreds of hours they spent decompressing.

At a depth of 230 feet, the pressure is intense and visibility is hazy at best. But Riendeau and the other divers still were able to witness something that only a handful of people have ever seen – a living ghost. "At the wreckage, you could still see the outline of the ship, but you had to look hard," said the Ware, Mass., diver. "She sank in an inverted position exposing all the iron armor that plated the ship."



In this artist's depiction, *Monitor* slugs it out with the confederate ironclad CSS *Virginia*, March 9, 1862. The battle was a draw, but naval warfare changed forever.



The *Monitor's* revolving turrett was her most distinguishing characteristic. Revoloving a full 360 degrees, it allowed the ship to fire in any direction regardless of heading. Note the canopy atop the turret.

The divers also found the remnants of an earlier dive by USS *Edenton* (ATS 1) from three years ago. *Edenton's* divers tried to remove the propeller using an underwater torch and were about an eighth of an inch through the shaft when rough weather forced them to abandon the operation and vacate the area. In fact, the team left so fast they left a few things behind, including their anchor.

"This was the apex of my career. The best dive I've ever been a part of," said Riendeau. "The teamwork and camaraderie was unlike any other dive I've been on. This was a hoo-yah for us."

MDSU-2's *Monitor* recovery team is now secured and the *Monitor's* propeller and shaft have been transported to the Mariner's Museum in Newport News, Va., where they will undergo an extensive preservation process.

On the ocean floor, bottom currents will gradually cover what remains of the *Monitor's* hull beneath a blanket of silt and mud, but her significance in the evolution of naval warfare can never be buried.

Benson is the assistant editor for All Hands.



A Piece of American Naval History

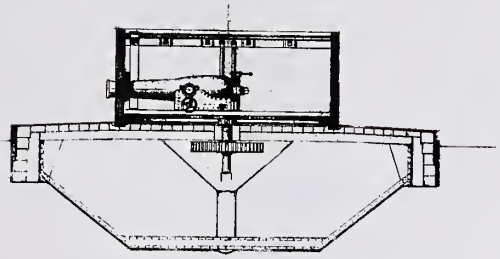
Monitor was the first of a class of low-freeboard, turreted warships developed during the Civil War by the Swedish-American engineer and inventor John Ericsson. Launched at Greenpoint, Long Island, Jan. 30, 1862, the ship was approximately 172 feet long, had a beam of 42 feet and was constructed almost entirely of iron. When fully loaded, it drew only nine feet of water and had virtually no freeboard. In fact, she was the first ship to have the engines and living spaces below the water line. She also had a newly-designed revolving turret which housed two 11-inch Dahlgren guns.

On the morning of March 9, 1862, *Monitor* met the Confederate ironclad CSS *Virginia* (formerly USS *Merrimack*) at Hampton Roads, Va., for the first-ever confrontation between ironclad warships. Despite *Virginia's* much larger size and firepower, *Monitor* held the tactical advantage because of her revolving gun turret – an improvement over *Virginia's* traditional broadside guns. The battle, which ended in a draw after the combatants exchanged cannon fire for four hours – sometimes at point-blank range, marked the beginning of the end for traditional wooden ships of war and forever changed the way naval warfare was to be waged. *Monitor* was lost in a storm off Cape Hatteras, N.C., on Dec. 31, 1862, taking 16 officers and crewmen to the bottom with her.

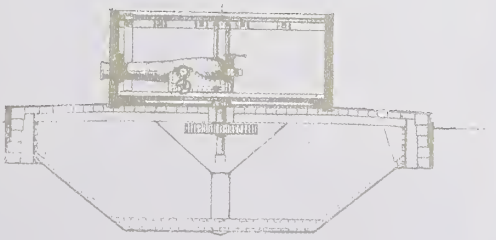
In 1973, 111 years after its sinking, *Monitor* was discovered off the coast of North Carolina in 230 feet of water in an area known as the "Graveyard of the Atlantic" – so named because of its unpredictable conditions and subsequent ability to inflict heavy damage on seafaring vessels. According to Jeff Johnson, a historian with the *Monitor* National Marine Sanctuary, "They don't call it a graveyard for nothing. You've got a warm-water current and a cold-water current and when they meet you can have a crystal-clear sky and 25-foot waves." *Monitor's* final resting place was designated as the first national marine sanctuary in 1975.

Story compiled by JO1 Jason Thompson, a photojournalist assigned to All Hands, *from information provided by the Monitor National Marine Sanctuary and the National Oceanic and Atmospheric Administration (NOAA).*

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ss-section of the Monitor Hull and Turr t.
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More than a passing

Photo story by JO1 Robert Benson



Last week, Master Chief Petty Officer of the Navy Jim Herdt shook 143 hands. He spoke to 2,411 Sailors. He made 133 phone calls. He spoke with a handful of senior admirals. And he did what he enjoys doing most, "Getting out to the ships and talking with those who do the work – the Sailors." As the new MCPON, Herdt follows a schedule that makes the President look like a shut-in. But he does it for one reason – to have a voice in policy that affects Sailors. Follow him for a day – a typical day… with an untypical man… in the "best damn Navy in the world."



There's only one man in the Navy who wears three stars above his anchor – MMCM(SS/SW/AW) Jim Herdt, the ninth Master Chief Petty Officer of the Navy. It took the Casper, Wyo., native 28 years, but Herdt has reached what some term the pinnacle of enlisted success. He is the senior enlisted advisor of the Navy. As MCPON, Herdt is responsible for advising the Chief of Naval Personnel on matters affecting the morale, retention, career enhancement and general well-being of "his enlisteds."

The MCPON is never out of touch. While cruising down the Washington Beltway, headed toward National Naval Medical Center, Bethesda, Md., Herdt talks with a master chief in San Diego about the implementation of the new Navy uniform, as JOC(AW) Natalie Dias prepares his notes. "The MCPON will usually get a quick update or refresher via phone prior to going into a meeting or giving a speech," said YN2(SW) Thomas Lindamood (right), who serves as the MCPON's administrative assistant. Lindamood, who was hand picked for the job, said he was chosen partially due to his background (he has served on ships and shore duty both in and outside of the United States). "They wanted someone who could give the MCPON an opinion on certain deckplate issues."





Chief Dias accompanies the MCPON through the maze-like hallways of the largest office building in the world – the Pentagon, which is just down the road from the MCPON's office at the Navy Annex. The MCPON meets with the CNO at least once a week to discuss Navy policy and fleet readiness.





With the eloquence of a politician, Herdt delivers a speech at the Senior Enlisted Medical Department Conference, covering such issues as retention, building a Sailor and leadership by example. "The best part of this job is getting out of the office and talking with Sailors," said Herdt.



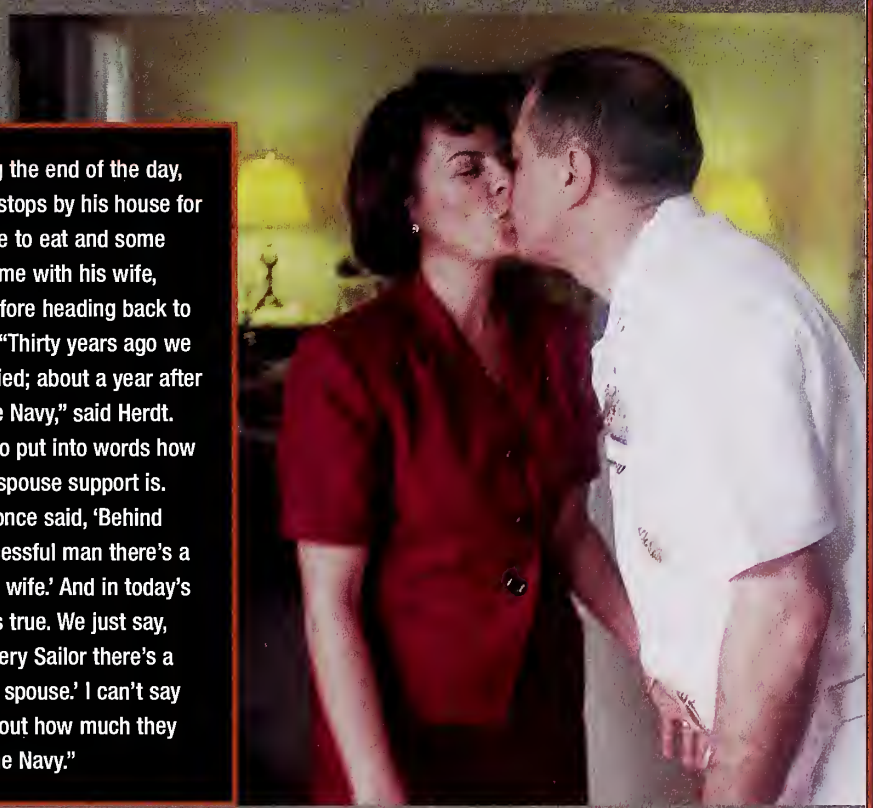
It's a small office, no larger than a one-bedroom apartment. The walls are lined with plaques and ships' ball caps, and the desks are standard Navy issue. But make no mistake, as indicated by the banner above the door, this is where the decisions that affect Sailors are made. Just before leaving for an appointment, Herdt checks in with his scheduler, YNC(SS) Mark Shafer and his Public Affairs Officer JOC(AW) Natalie Dias.

CER OF THE NAVY



Good Navy training from the MCPON has worked wonders with Shelby, the Herdt's poodle. Through long walks, good meals and ball catching, the four-year-old poodle has truly become one of Herdt's best friends.





It's nearing the end of the day, and Herdt stops by his house for a quick bite to eat and some precious time with his wife, Sharon, before heading back to the office. "Thirty years ago we were married; about a year after I joined the Navy," said Herdt. "It's hard to put into words how important spouse support is. Someone once said, 'Behind every successful man there's a supporting wife.' And in today's Navy that's true. We just say, 'Behind every Sailor there's a supportive spouse.' I can't say enough about how much they mean to the Navy."

SAILORS OF THE YEAR



Chief Machinist's Mate (SW/AW)
Richard T. Sherman

SHORE SOY

Chief Engineman (EOD)
Eric C. Pettus

PACIFIC FLEET SOY



Chief Disbursing Clerk (SW/AW)
Ray D. Hobbs

ATLANTIC FLEET SOY

Chief Gunner's Mate (SEAL)
Christopher Zevallos

RESERVE SOY

By JO1 Robert Benson

Top Gunner

When he set off on a four-day, infiltration mission through snow-covered mountains in the dead of winter, he knew what to do. When he was asked to run miles in the sand carrying a tree above his head, he knew what to do. When he had to jump out of airplane and free-fall for 30,000 feet before opening his parachute, he knew what to do.

But now, faced with a seemingly simple decision, Gunner's Mate 1st Class (SEAL) Christopher Zevallos is at a loss. He just can't seem to make a decision about where to spend the one-week free vacation he won for being selected as the 1998 Reserve Sailor of the Year.

"There's a lot of great perks that go along with this," said Zevallos. "I become a chief, I'll serve on various policy-making boards and I'll meet a lot of people when I go to Washington, D.C., for the official ceremony."

And he'll become one of those people that gets pointed at and talked about under hushed lips. Such is the life of a SOY. The word of his selection as SOY hit him with Mardi Gras-like excitement May 7, in a New Orleans ceremony. "It was myself and three other candidates who went up for the title," said Zevallos. "I was really impressed with the other Sailors; any one of us could have been selected – they were really great guys."



Photo by TSGT Scott Wagers

Zevallos, a native of Orcutt, Calif., said he received a lot of positive response from his peers after word of his selection spread. "As a SEAL, when you're working with the fleet, you always feel that you're being observed. They check to see if you're really all you're cut out to be. So taking on the Sailor of the Year title is kind of like that – people are going to be watching me a little closer now."

They've been doing that for years though, ever since he signed on for SEAL training in October 1991. His first assignment was with SEAL Team 1 at Naval Amphibious Base, Coronado, Calif. He made three overseas deployments during that tour. Following his release from active duty in August 1996, Zevallos immediately affiliated with Naval Reserve Naval Special Warfare Group 1, Det. 219, Naval Reserve Center, Port Hueneme, Calif. When he's not drilling for Reserve duty, Zevallos works at Vandenberg Air Force Base in Lompoc, Calif.

Zevallos is married to the former Elizabeth Ann Beamsley of La Habra, Calif. They reside in Orcutt and have four children, Lesley, Jeffrey, Ashley and Mark. Perhaps the youth surrounding him inspires his positive outlook. "SEAL training is like a self-confidence course. You get confidence in life – confidence that is so unmatched that you are able to conduct any mission."

Now, if he could only solve that vacation thing.

Shored Up

trip him of all his glory.

Take away the perfectly-creased, military uniform, the spit-shined shoes, the confident leadership, the raw enthusiasm, the incredible job skills and the Navy pride – take all that away and look again. You'll see something else.

You'll see a man with something that puts him a notch above the average Sailor – the ability to get things done.

But don't accuse him of being better than the average Sailor, otherwise Machinist's Mate 1st Class (SW/AW) Richard T. Sherman, the 1998 Shore Sailor of the Year, might get upset.

"I don't agree with that average Sailor thing," he pronounces. "That average Sailor makes the Navy work. There's no job an average Sailor can't do. It's all about mission accomplishment and the average Sailor helps us meet that goal."

Honor, courage and commitment run in this guy's blood. "I don't sit behind a desk and tell my people what to do, I'm right there with them. I've been lucky to have worked for a lot of good chiefs and officers who have honed my skills and taken very good care of me."

His strong beliefs were likely forged during his many years at sea. Sherman, who calls himself a "deckplate Sailor," has been on ships nearly his whole career, including



Photo by JO1 Rodney J. Furry

USS *Capodanno* (FF 1093), USS *Dixon* (AS 37), USS *Leahy* (CG 16) and ARCO (a floating drydock). His shore duty assignments include Lackland Air Force Base, San Antonio, and Naval Air Station, Miramar, Calif., where he was selected as the 1996 and 1997 Sailor of the Year and as runner-up, 1996 Commander, Naval Air Forces, Pacific Fleet Shore Sailor of the Year.

"I'm just out there doing my job," said the Boston native. But it takes more than doing your job to be called the best of the best. "You have to have enthusiasm on the job. You must also have professional knowledge. You have to care for your people and you have to work hard."

Call it his recipe for success – a recipe he hopes to parlay into two stars.

No, not admiral's stars – the stars of a master chief.

By PH2 Joseph Gunder III

Cashing In



Photo by JOSN Greg Bobish

Disbursing Clerk 1st Class (SW/AW) Ray D. Hobbs joined the Navy to be an accountant, and by his calculations, his selection as the Atlantic Fleet Sailor of the Year really adds up.

"It's something I just can't put into words," said Hobbs. "It's the pinnacle of my career. I just wanted to be Sailor of the Year on my ship, USS *Vicksburg* (CG 69). It's an honor. I couldn't have done it alone. It's all the good people I work with – the chiefs, the disbursing officer and everyone who offered career advice."

Hobbs joined the Navy in 1982. After Disbursing Clerk "A" school, he reported to Fleet Air Reconnaissance Squadron 2 in Rota, Spain, with a follow-on tour at the Personnel Support Detachment.

He got out in 1989 and furthered his education at a local college near his hometown of Fayetteville, Ark. But, he "missed the camaraderie of being in the Navy."

Hobbs believes pursuing his education is important for a couple of reasons. "The Navy might be a career, but it's not a lifetime. That's why off-duty education is so important. You have to prepare yourself.

"If there's anything the Navy has given me, it's the discipline and the tools to advance," he said. "If you put your mind to it, and apply yourself whole-heartedly and utilize those around you, you can meet your goals."

In an environment where most of the work force is in their late teens and early 20s, "You need to have a good ear, enforce the rules, but be the example," said Hobbs. "If you just listen to people and keep an open mind, we can bridge the generation gap."

Hobbs has no desire to accept mediocrity. "I want to further myself. I want to move up, maybe even be a senior or a master chief – possibly even a limited duty officer in the supply corps. I want to be the type of CPO anybody can approach for anything. I want to be able to help people by using contacts in the mess, or through networking."

Hobbs considers it a real honor to represent the Navy. "There's a lot of pressure to live up to this new standard. Never in my wildest dream did I believe I'd ever be a SOY. But I always strive to be the best I can."

Big Bang

He was almost a soldier. In fact, when Eric C. Pettus walked into the recruiting office in 1986, the Army was his first choice. But then the Navy caught his eye and he has never looked back. He wanted to see the world and now he owns it, having been selected as the Pacific Fleet Sailor of the Year.

Though he is rated as an engineman, Pettus wanted more. "I wanted something exciting, and this certainly is no ordinary job," said Pettus, who gets to make things blow up as an explosive ordnance disposal technician. "Actually, we call it rendering them safe. We deal with all kinds of explosives – mines, nuclear weapons, chemical explosives." It's clear if you listen to Pettus talk that he really likes doing what he does.

His secret for success: "Hard work, a good crew and good officers are what you need to get you through."

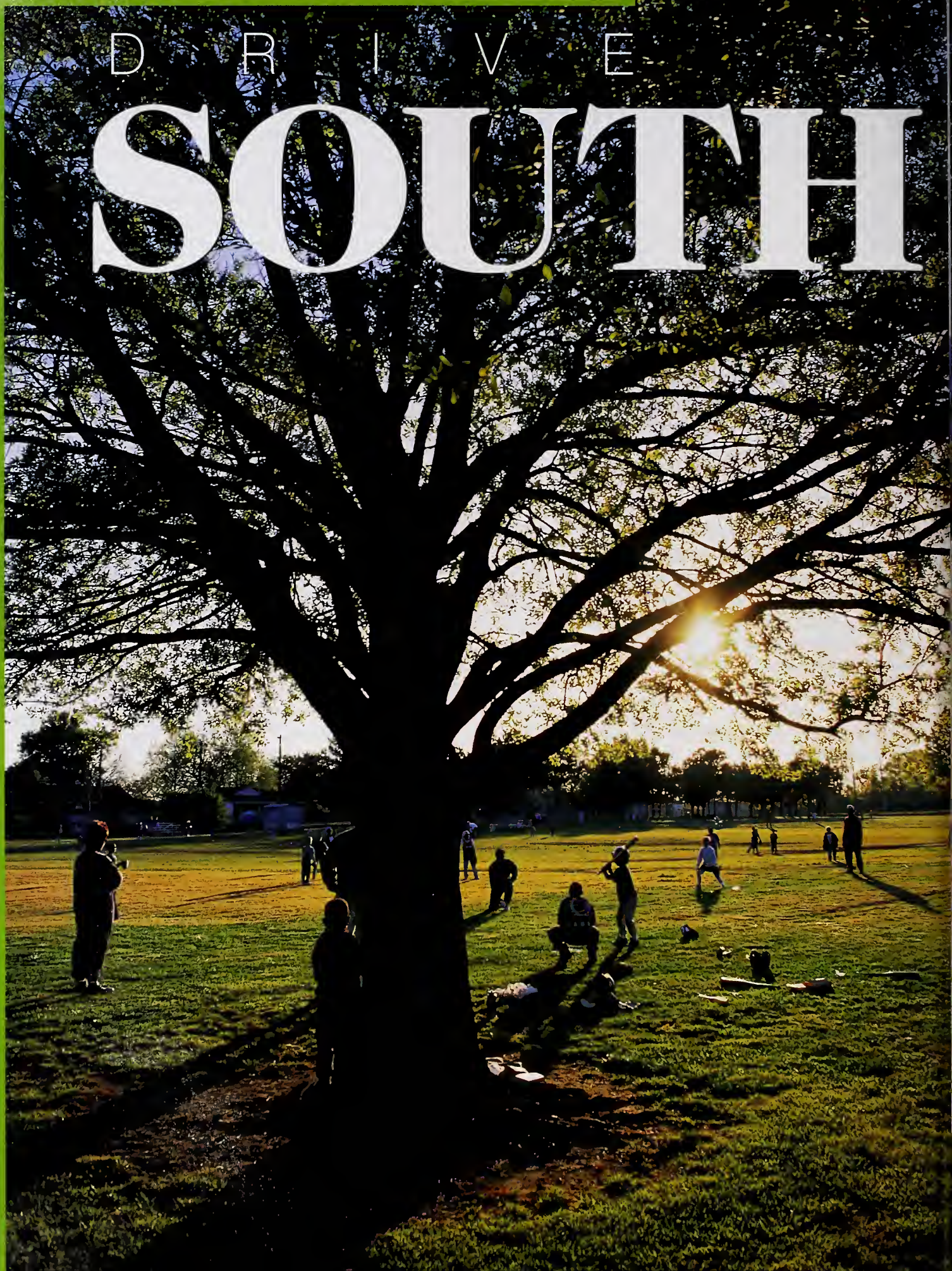


Photo by JO1 Rodney J. Furry

After Explosive Ordnance Disposal School, he joined the crew of USS *Elrod* (FFG 55) and later served with Explosive Ordnance Disposal Mobile Units 4 and 3. It was at Explosive Ordnance Disposal Group 1 that he became the Leading Petty Officer of the Diving Platoon. Pettus said that at one time he needed an attitude check – an attitude check that today influences the way he treats those who work for him. "It was an inspection and I was feeling a little headstrong – a little full of myself because I was an EOD. I was busy running my mouth, talking back to the inspectors. One of them was a master chief, a senior EOD. He pulled me aside and basically told me to keep my mouth shut and my ears open." In Pettus' line of work there is no time for cockiness and no room for error.

Pettus just completed one of his goals, to be a Master EOD Technician, which means he is qualified to lead dive teams. Eventually, he wants to apply for the limited duty officer program.

The 31-year-old considers himself a family man. He enjoys spending time with his wife, Weslie, and his daughter, Sydney. He loves to play golf and often lends his time and experience while working at his daughter's golf camp. Pettus isn't quite sure where the future will take him. But he is pretty sure it will have something to do with "rendering them safe."


DRIVE
SOUTH

MILLINGTON WELCOMES ITS NEW RESIDENTS FROM THE NATION'S CAPITAL WITH OPEN ARMS... AND A FEW SURPRISES.

By Pam Kidd



Photo courtesy of the Memphis Convention & Visitors Bureau

Millington is located just 20 miles from downtown Memphis – a city which has achieved a balanced landscape of lush trees and urban skyscrapers.

On the crest of a brand-new century, BUPERS is rolling into Millington. And for long-time residents and newcomers alike, uncertain endings are becoming bright, new beginnings.

After a congressionally-mandated Base Realignment and Closure (BRAC) Commission relocated Millington's Navy Air Technical Training Center to Pensacola, Fla., in 1996, this Tennessee town's livelihood seemed threatened.

Then came the announcement: The Navy's Bureau of Personnel (BUPERS), the department that coordinates all personnel within the Navy, would move to Millington from Washington, D.C.

"For hometown folks, our motto had long been that Millington is 'the best-kept secret in Tennessee,'" says Teresa Beans, executive director of the Millington Area Chamber of Commerce. "When we first heard that BUPERS had been reassigned to Millington, we realized it was time to share our secret with a host of new friends who would be coming from Washington."

Meanwhile, up on Maryland's Eastern Shore, Debbie Mullins was trying to digest that same news from a very different vantage point.

Continued on next page.



Photo courtesy of Memphis Convention & Visitors Bureau

Hernando DeSoto Bridge

When her husband, Bill, a BUPERS employee, announced that they would be leaving their home on Kent Island, outside Washington, and moving to a little town in Tennessee, she was shaken.

"The Washington area had been home all my life," says Mullins. "My husband worked at BUPERS in the Navy's Morale, Welfare and Recreation (MWR) Department, and for him it's not a job, but a way of life. So I knew looking for employment outside of MWR was out of the question. ... I knew we were Tennessee-bound."

Back in Millington, Beans and other community leaders were just beginning to comprehend the scope of change that BUPERS would bring. In 1990, the census listed Millington's annual per capita income at $8,000. This low figure was easily traced to the thousands of entry-level Sailors who resided on the Navy base. Now BUPERS would be replacing those Sailors with 1,428 military personnel with an average annual income of $76,000. The base would also employ 1,200 civilian personnel with an average annual income of $61,000.

"We knew that everything would be affected – from city government to new housing construction to filling our schools and churches," says Beans.

And BRAC was... benefiting Millington in other ways as well. For the first time, MWR facilities opened to civilian membership, offering to the community at large a range of amenities from golf, horseback riding and other recreation activities to travel agency services and equipment rentals.



Photo courtesy of Memphis Convention & Visitors Bureau

Graceland

WELCOME TO

By JO2 Jeremy Allen

Millington

The year is 1878 and a northern Shelby County plantation owner is determined to help a small group of settlers establish a frontier town along the newly-established Chesapeake and Ohio railroad line – a rail line which just happens to criss-cross his 5,000 acre tract of land. Seeing as how a large portion of that land is elevated and perfect for building homes, the plantation owner figures the best way to get those folks started is to give them a huge chunk of it. And so it was that the land was donated and a town was built – and named after its most benevolent benefactors, Mr. and Mrs. George Millington.



Photo courtesy of Millington Chamber of Commerce

And in the end, the city of Millington wasn't the only winner, as transplants such as Debbie Mullins would soon learn. Living expenses are considerably lower in West Tennessee, housing is more affordable, public schools are highly rated and commutes are relatively short.

"The people of Millington befriended us and helped us cope with the immense change we were experiencing," says Mullins. "Their genuine concern for our well-being helped us assimilate quickly into the area. We're now active members of Millington's First Baptist Church as well as the city's Chamber of Commerce. Our daughter, Crystal, attends Millington High School, where she has made many good friends. And neither Bill nor I miss the congestion of the East Coast, especially the three-hour daily commute in and out of D.C."



Photo courtesy of Memphis Convention & Visitors Bureau

Beale Street

"Now, more than ever, Millington has the best of both worlds," says Beans. "We look forward to [later this year], when the BUPERS move to Millington will be complete, but for now, the secret is out and we believe that the quality of life in Millington surpasses all others. We have all the amenities of a large city nearby, in a place where the city fathers listen to local citizens, the streets are safe, people feel secure ... and newcomers are welcomed with open arms."

Continued on next page.


Photo courtesy of University of Memphis

University of Memphis Football



Photo by David Mudd

The community grew quickly throughout the rest of the 19th century while other smaller settlements were established nearby. By the time the city was officially incorporated in 1903, the people of Millington had developed a sense of civic pride – a pride that remains prevalent today.

Millington established water and light systems, a telephone company, a local newspaper, a library and music room, Scout groups and the first school bus service for students in Shelby County – a wagonette, drawn by mules. Millington also established the first accredited school in Shelby County – a county which includes the larger city of Memphis, 15 miles to the south.

Today, Millington has some of the finest schools in the nation. Millington South Elementary, recognized by the U.S. Department of Education, is just one of four local elementary schools with a combined enrollment of 2,139 students and a complement of 104 teachers. The junior high has an enrollment of 500 students and a complement of 30 teachers.

Millington Central High School is a comprehensive school for 1,500 students, employs more than 80 teachers and is

Continued on next page.


Photo courtesy of University of Memphis

As for Debbie Mullins, she has not only learned to love the quality of life in Millington – she is helping to spread the word as one of the chamber's Goodwill Ambassadors. Last spring she traveled back to Washington, D.C., to represent the chamber at a BUPERS Relocation Fair. Her job was to answer questions and offer advice to other BUPERS employees who will be relocating to Millington.

"I surprised myself on that trip," says Mullins. "I found myself anxious to board that plane and begin the trip back home – to Millington."

This article reprinted courtesy of Millington Magazine.

SMALL ERRORS

He was a fine Sailor in every respect. He made petty officer 1st class in six years and was now up for chief. His evaluations were outstanding. He was known and respected for being a good leader and he was involved in several volunteer projects in his community. Everything was in order, all the right "tickets were punched" for him to make chief... or so he thought.

When the results were announced, his name wasn't on the list. Why? Because he had overlooked one small detail. He failed to check his microfiche and some documents never made it into his record.

Don't let this happen to you. Remember, you are responsible for the completeness and accuracy of your record. Don't let a small mistake cost you an advancement. Learn to ask the right questions.

supported by a staff of some 30 auxiliary personnel.

In recognition of its many accomplishments in economic development, community leadership and overall livability, Millington was awarded the Three-Star Award by the state – Tennessee's highest community rating.

Officially designated "Flag City, Tennessee" by the state legislature in 1986, Millington hosts a Flag Day Celebration each June – just one of several events each year that capture the city's small town flavor and community spirit. Some other events include an International Goat Day in September, a Cotton Country Festival in October and a Christmas parade in early December.



Photo courtesy of Millington Chamber of Commerce

Millington, nestled in a beautiful section of northern Shelby County dotted with peach orchards, cotton fields, crystal clear lakes and wooded countryside, is a community with just the right balance of yesterday and today.

Within a three-hour drive of downtown Millington are many state and national parks just waiting to be explored. Meeman-Shelby Forest State Park encompasses 13,000 acres, including a wildlife management area which borders the mighty Mississippi River. The park has boat ramps, picnic areas, horseback riding, hiking trails, hunting and fishing, as well as camping areas, cottages and an Olympic-sized swimming pool.

Millington is also home to USA Stadium, a national baseball training site for USA and Olympic baseball teams, and minor league teams like the Memphis Redbirds. International Olympic teams from Cuba, Japan, Australia, Nicaragua, Russia, Venezuela, Taiwan, Korea, Mexico and Italy have come to Millington to play against Team USA. The stadium also hosts numerous outstanding college and high school tournaments to provide exciting baseball action throughout the year.

For auto enthusiasts, the Memphis International Motorsports Park boasts a 600-acre auto racing and motorsports facility for both professional and amateur competitions.

QUESTION

TERA is being authorized for my rate, but my request was disapproved. Why?

ANSWER

TERA is considered on a case by case basis. A rate will be targeted when it is overmanned. But detailers and community managers will still review all applications for early retirement based on the needs of the Navy, the affected commands and the Sailor.

QUESTION

Can I get a "C" school en route to my next command?

ANSWER

Most "C" school quotas are utilized to fill NEC requirements of a command's billet file. If there is a valid requirement for a new NEC and if a school quota is open in the proper transfer window then a "C" school will be considered en route to the next command.

QUESTION

Can I extend on shore duty? I am involved in off-duty education... I am in a critical billet and want to see a particular project through to completion... My child is getting ready to complete school... etc, etc.

ANSWER

Although the detailer makes every effort to accommodate personal requests, extensions beyond the normal shore length are normally disapproved because of the fleet requirement to relieve those Sailors coming off sea tours.

QUESTION

Why can't I transfer to the opposite coast?

ANSWER

Each case is considered individually, but the common sense answer is that if there is a valid requirement on the coast of current location, then the financial demand for a coast-to-coast transfer cannot be justified.

Continued on next page.



Photo courtesy of Millington Chamber of Commerce

Events run weekly on four different tracks from mid-March through September.

Music lovers will enjoy the Strand Music Hall – a movie house built in 1939 that is now filled with the sounds of gospel music on Friday nights and country music on Saturdays.

For those interested in culture, there is the Memphis Brooks Museum of Art. Founded in 1916, it is the oldest and largest fine arts museum in the state of Tennessee.

The town of Millington and the city of Memphis have a little something to offer everyone. From Graceland to the Beale Street Music Festival, you will look a long time before you find a town with as much pride, spirit and down-home goodness as Millington, Tenn.

Allen is a photojournalist assigned to All Hands.



Photo courtesy of Millington Chamber of Commerce

QUESTION

Can I go overseas on my next tour instead of going to a ship or to the fleet marine force? Can I go to a specific location for my shore duty, if I want to be near home?

ANSWER

Very limited opportunity exists for shore duty outside of the normal fleet concentrated areas. The availability of billets, the priority of those billets and a Sailor's career path will be the primary deciding factors of their next assignment.

QUESTION

Have my orders been released, and when will I get them?

ANSWER

Each detailer writes their orders as soon as possible near the six-month window. The orders are either sent via Naval message or by U.S. mail. Each format has a specified delay that is dependent on a series of factors, but most orders are in the Sailor's hand within three weeks of being released by the detailer.

QUESTION

Can I use my "GUARD III" option for a guaranteed assignment?

ANSWER

BUPERS encourages the use of the "GUARD III" option, but there has to be a valid billet available in the location or platform of choice.

QUESTION

How do I get considered for a special duty program assignment?

ANSWER

Each rating provides personnel to the special duty programs. There are parameters that detailers must follow when making assignments. Discuss the special duty programs options with your detailer when you are negotiating your next assignment.

QUESTION

When do you get your next set of requisitions?

ANSWER

Pick up any copy of *Link*. The next four sets of requisition dates are listed on the back cover.

MAKING THE Right Moves

Ready to Move

Approximately 12 months before your projected rotation date (PRD), you should review your duty preference sheet and update it if necessary – after talking with family members and your career counselor. If you have special considerations, such as an Exceptional Family Member (EFM), put it on the duty preference sheet so that information is known up front. You can update your duty preferences via BUPERS ACCESS.

When to Call

Nine months before your PRD you should check in with your detailer. Read the back page of *Link* to determine when the first requisition (req) of the month will occur and make plans to call then. Recognize that most detailers take a few hours of the first day of a req cycle to purge that req. This ensures that billets filled on the last day of the previous req do not appear and that there are no NEC errors in the new req.

Purging can take up to six hours for NEC-intensive ratings like electronics technician, aviation electronics technician or postal clerk. Your command's career counselor should be able to help you determine how long this process takes for a given rating or NEC. If the career counselor doesn't know, send a BUPERS ACCESS inquiry to your detailer. If you're overseas, check *Link* for the night detailing schedule (normally the second working day after the req comes out).

What to Say

Plan your call. Have your duty preference sheet available and make a list of questions you want answered. Know whether you are shore or sea duty eligible (your career counselor can tell you). Prioritize what is most important to you and your family. You are going to have to live with this detailing decision for the next three to five years. If sea duty eligible, consider traditional sea duty (ships/squadrons), overseas sea duty (Type 4) or arduous overseas shore duty (Type 3).

Recognize that most selection boards look for Sailors who take hard jobs in relatively traditional career patterns. That is, if you continually take Type 3 duty as opposed to Type 2 or Type 4, you may stand out as an aberration to a selection board. On the other hand, if your rating is one with little sea duty opportunity, such a decision may be in your best interests.

Remember to expect at least one overseas tour in your career (and more than one if you are in a rating with a CONUS/OCONUS rotation). This assignment may be a Type 3 or Type 6 (neutral overseas shore duty). Do you want to pick when and where, or have it decided for you at some later date – when it's your turn?

Know what the traditional jobs are for your rating. Talk with senior personnel about their career progression. Your detailer can also help guide you.

QUESTION

I was just advanced in rate. Does my tour length change to match my new pay grade?

ANSWER

PRDs are set for the pay grade you were when the orders were issued. They are not adjusted due to advancements or reductions in rate.

QUESTION

I just married (or am going to marry) a military member. Will we be able to be stationed together?

ANSWER

The Enlisted Transfer Manual (Art. 3.21) states that every effort will be made to allow military couples to move together (whenever possible) in the same manner as non-military couples. Both military members must submit an official co-location assignment request via the NAVPERS 1306/7.

QUESTION

When should we submit our spouse co-location requests?

ANSWER

Submit these requests 12 months prior to your PRDs. This allows detailers the maximum amount of time to work on your request. If you attach a copy of your spouse's approved request to yours it can help speed the process along. But you must remember, spouse co-location is not a guarantee. Military couples need to realize the difficulties involved in matching their needs with the Navy's needs. It will not always be possible to get everything you request and still meet the Navy's mission. Detailers will do their best to ensure you are stationed as close together as possible.

QUESTION

I'm an E-5. Why don't you just put me into that E-6 slot? Aren't detailers allowed to go up or down one pay grade any time they want to?

ANSWER

No. Any time a detailer wants to make a pay grade substitution they are required to get EPMAC approval.

Continued on next page.

If you're shore eligible, know if you want a rating-specific job or a general-duty job. General-duty assignments are jobs that are administratively assigned to your rating to provide sea/shore rotation but do not require the specific skills of your rating.

Petty officers of all grades are also eligible for assignment to various special programs, including recruiting, recruit company commander, physical security, equal opportunity and drug/alcohol abuse counselors. Most ratings have an allocation to provide to each of these special programs, based on the rating, the needs of the special programs and in-rate requirements.

When you have come up with a career plan, run it by your career counselor or chief and get ready to make the call.

The Call

Listen and take notes on what the detailer says. Don't be a victim of "selective listening" (hearing only what you want to hear).

Verify that the detailer has your latest duty preference sheet. Tell him or her what you want to do and listen for their advice. If you need to talk over a proposal with your family, remember another Sailor may decide upon the billet you are thinking about and it may not be available when you get back to the detailer. You may want to consider having your spouse with you when you call.

When you settle on a set of orders, write down all applicable information, including all training requirements and the anticipated transfer date.

Transfer Date Determination

Detailers will normally write orders for three months before to four months after your PRD. To transfer earlier, your command must release you by message or letter. To transfer later requires a command endorsed NAVPERS 1306/7 requesting the extension. Such actions need to occur before the nine-month date when your billet appears on the req. Approval chances are reduced if another Sailor is ordered into the billet.

Orders

Detailers will write orders within a few days of this verbal agreement. They must write them while the req is current. Most special programs and all overseas assignments require screening by the command transferring the Sailor before executing the orders. If the Sailor or his or her family fails screening, a decision must be made whether or not the Sailor will go unaccompanied to the new duty station. PERS 40BB processes such actions.

New PRD

The PRD at the command accepting the transfer is determined by type and location. If overseas, it is normally the DOD tour. If CONUS shore, it is normally the length of Normal Shore Tour (NST) for the Sailor's rate. If CONUS sea, it is the prescribed sea tour.

Information provided by BUPERS Public Affairs

CHECK LIST **FOR CALLING**

- Talk to your career counselor.
- Be sure it's time to call. That's between six and nine months before your PRD.
- Have more than one plan. Map your career goals in advance.
- Talk to your spouse.
- Be prepared. Write down your detailer's name and phone number and your full name, SSN, rate and return phone number. Also, jot down your top priorities and any questions you have. Be specific. Keep this in front of you when you call.
- Tell the operator if you are calling from overseas.
- Be ready to make a decision.

Q U E S T I O N

When is the best time to call for orders?

A N S W E R

Call on the first requisition cycle after you come into the nine-month detailing window. You have nothing to gain by waiting. When you call early you have the maximum chance of getting your choice of assignment.

Q U E S T I O N

What are the different types of duty?

A N S W E R

- **Type 1 CONUS Shore Duty**
- **Type 2 CONUS Sea Duty**
- **Type 3 Overseas Shore Duty (sea duty for rotational purposes)**
- **Type 4 Overseas Sea Duty**
- **Type 5 Neutral Duty**
- **Type 6 Overseas Shore Duty (neutral duty for rotational purposes)**

Q U E S T I O N

How can I get a split tour?

A N S W E R

Split tours for sea duty can be requested. You must complete 24 months on board your present command (you may submit your request earlier but, if approved, orders will be written for transfer at the 24-month date). These transfers must be local area with less than a $500 cost.

Q U E S T I O N

How can I improve my chances to advance?

A N S W E R

While there is no magic answer, the following list is always a good start:

- **Become a rate expert.**
- **Maintain outstanding evaluations.**
- **Self-development through correspondence courses and off-duty education.**
- **Take ownership of your evals, make certain you get full credit for all your effort.**
- **Set realistic and challenging goals for yourself.**



Photo by PH3 Renso Amariz

Transition Assistance Management Program (TAMP) Sailors and their families facing separation from the Navy must make a difficult transition – the transition from a secure and structured military lifestyle to a new and unfamiliar civilian community. TAMP provides a myriad of services to make that change as smooth as possible – from pre-separation and benefit counseling to employment referrals and relocation assistance.

Pre-separation counseling A qualified TAMP counselor can provide information in the following areas:

- Education assistance benefits
- Information on affiliating with the Selective Reserve
- Programs available for job search assistance
- Job counseling for your spouse
- Relocation assistance services
- Conversion of health insurance and/or medical and dental coverage
- Counseling on the effects of a career change on service members and their families
- Financial planning assistance and Survivor Benefit Program (SBP) information
- Compensation and rehabilitation benefits provided by the Department of Veterans Affairs.

Your Command Career Counselor will meet with you up to 180 days before separation but not later than 15 days after your command receives official notification of your separation. He or she will have you sign a Page 13 entry indicating in which of the above areas you desire counseling and will refer you to the nearest Family Service Center (FSC).

Retirement Most military members become eligible for retirement after 20 years of active-duty service. Retirement from the military provides an element of security and gives individuals the chance to embark on a second career while still enjoying many benefits of the first.

Computation of pay Navy retired pay is computed under a variety of provisions. Active-duty members who have questions about the formula used to compute retired pay should consult a career counselor. Retired members should submit questions in a letter to the Defense Finance and Accounting Service (DFAS).

Survivor Benefit Plan Established in 1972, the Survivor Benefit Plan (SBP) complements Social Security and provides those service members who reach retirement eligibility – including reservists who qualify for retired pay at age 60 – an opportunity to leave a portion of their retired pay to their survivors.

Q U E S T I O N

Why can't I go to school?

A N S W E R

Detailers are working to provide members every possible opportunity for training. The following are the criteria that detailers must follow:

- **There must be an NEC authorized for the training requested at your ultimate duty station that is not filled or is projected to be vacant.**
- **There must be a school seat available within a reasonable amount of time of your reporting date if being ordered to an NEC-specific requirement.**
- **You must meet prerequisites before assignment.**
- **You must be eligible in all respects and willing to obligate service if necessary.**

Q U E S T I O N

My detailer told me I was posted, what does that mean?

A N S W E R

This means you have been placed on a requisition to hold a billet. It does not mean that orders have been issued. Once a billet has a posting next to it, others who may also want that billet are turned away. Therefore, changing your mind on a billet you have negotiated and to which you have been posted is usually not done.

Q U E S T I O N

What is an MAT?

A N S W E R

MAT stands for minimum activity tour. This is the minimum tour length you have to complete before you can be transferred. Most commands have a 24-month MAT. This assures each command gets stability from your assignment. This minimum is one of the most significant fixed numbers in the budgetary process. An early move is an unfunded move.

Information provided by BUPERS Public Affairs.

The U.S. Naval Home The United States Naval Home in Gulfport, Miss., is part of the Armed Forces Retirement Home (AFRH) System and is for military retirees and certain veterans with significant wartime service.

Former military members who are 60 years or older and in good physical health are eligible for admission. For a more detailed explanation of admission eligibility, call the Naval Home toll free at 1-800-332-3527 or the Soldiers' and Airmen's Home at 1-800-442-9988.

Unemployment compensation Your eligibility for unemployment compensation is determined by the law of the state in which you file a claim.

Contact your local office of the State Employment Service to determine eligibility.

Burial benefits The Retired Activities Section of the Bureau of Naval Personnel (PERS 662C) can provide information about a service member's burial benefits. Call toll free 1-800-255-8950 or check with your local Retired Activities Office (RAO).

VA Medical/Dental services Veterans discharged or released from active duty under conditions other than dishonorable may be entitled to medical and dental care at Veterans Affairs (VA) health facilities around the United States. VA provides necessary dental treatment for veterans who were not able to receive a dental examination and treatment within 90 days of discharge or separation of military service. Different criteria apply for treatment of veterans who have dental disabilities resulting from combat wounds or service-related injuries.

Education assistance The VA administers a number of educational assistance programs for veterans and service personnel. Contact your local VA office for details.

VA home loans The VA home loan guarantee program offers advantages that other loan programs do not. First, VA loans are made with little or no down payment. Second, the borrower can repay all or part of the indebtedness at any time without penalty.

To be eligible, a veteran must have been discharged under conditions other than dishonorable, after serving a minimum period of time on active duty.

Memorial affairs Any veteran who has been discharged under other than dishonorable conditions is eligible for burial in a VA national cemetery.

Although the law does not allow for gravesite reservations, veterans can make things easier for their survivors by keeping military service records accessible and verifying eligibility with VA.

Once eligibility and space are determined, the VA will open and close the grave, furnish a headstone or marker and provide care and maintenance.

Other Information For most veterans' programs, there are no time limitations. In some cases, however, eligibility does expire.

The booklet, "Federal Benefits for Veterans and Dependents," gives up-to-date, detailed information on all VA programs. If you are interested in a copy, send $2.75 to: The Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The stock number is 051-000-00-198-2.

Information provided by BUPERS Public Affairs.

INTERCONNEC



AEC(AW) John Gross, the AE detailer, contemplates a sailor's request for shore duty.

Photo by PH1 Jim Hampshire

TIVITY

By JO1 Jason Thompson

The hands of the young aviation electrician's mate (AE) began to tremble as he placed the receiver to his ear. His heart was pounding so hard he could barely hear the dial tone. Taking a deep breath, he composed himself enough to nervously punch in the phone number. He waited for what seemed like an eternity to be connected as hundreds of questions flashed through his brain – *Where will I be stationed next? Overseas? What will my job be like? What will my chief be like? Can I get my warfare pin there? What about college?*



Photo by PH3 Sam Dallal

AEAN Patrick McKinley, from Land O'Lakes, Fla., performs maintenance on an AIM-7 *Sparrow* medium-range, air-to-air missile mounted on an F-14 *Tomcat*.



Photo by PHAN John Sullivan



Photo by PH3 Cynthia Zarate

AE3 Long Tran, from Bloomington, Minn., troubleshoots an S-3 *Viking's* high frequency radio.

Meanwhile, thousands of miles and several time zones away, an enlisted detailer sits in a tiny cubicle hunched over a stack of papers. He pores over the names, numbers and NECs of hundreds of AEs who need orders cut by the end of the week. In his job, the pressure of managing the careers of more than 4,000 enlisted Sailors is what makes his heart pound.

The phone rings. Before he answers, the chief reminds himself of the kinds of questions he will ask before another set of orders can be cut. *Is the Sailor qualified for the job? What are the needs of the Navy? Is it cost-effective to send the Sailor to a squadron overseas? What's my budget for the new fiscal year?*

AEC (AW) John Gross tackles those kind of tough questions every day. From his desk at the Bureau of Naval Personnel, the chief has what he calls the "God's-eye view" of every AE in the fleet. The burden of deciding where an individual will be stationed falls squarely on his shoulders.

"Detailers are the in-rate professionals charged with maintaining a big picture and ensuring their communities are staffed appropriately," said Gross. "That means getting Sailors where they are supposed to be on time and – to the greatest extent possible – in accordance with the wishes of the members."

But given the intense pressure enlisted detailers are under to fill critical billets as well as meet fleetwide downsizing requirements, accommodating the personal desires of individual Sailors isn't always easy.

"If everybody goes where they want to go, there would be large holes in the fleet," explained Gross, a veteran of eight years. "Every detailer's bottom line is to make sure the needs of the Navy are met. Unfortunately, there are times when it will be at the expense of individual members."

Does that mean Sailors shouldn't even try to take a shot at their dream billet? Of course not. It just means they should be prepared to serve where the Navy and the nation needs them most.

"The way I see it, it doesn't matter where a Sailor is stationed or what job he or she is performing – they're still defending the nation," said Gross. "In the grand scheme of things, that's what being a Sailor is all about."

Thompson is a photojournalist assigned to All Hands.



Photo by PH3 Cynthia Zarate

AEAN Bobby Goodman, from Jacksonville, Fla., solders circuit card components on an aircraft radar detection unit.



Photo by PHAN John Bringer Jr.

AE2 William Clay, from Great Bend, Kans., performs electrical tests on aircraft components



Photo by PHAN John Bringer Jr.

AE3 Charles Wilkes, from Plano, Texas, repairs the wiring harness on an aerial camera magazine from an F-14 *Tomcat*.



Photo by PHAN John Bringer Jr.

AEAN Andrew Davies, from St. Davids, Pa., uses an automated test bench to troubleshoot an armament control panel for an S-3 *Viking*.



Photo by PH3 Cynthia R. Zarate

AE3 Jose Miller, from Murfreesboro, Tenn., examines electrical schematics prior to troubleshooting a radio frequency test set.

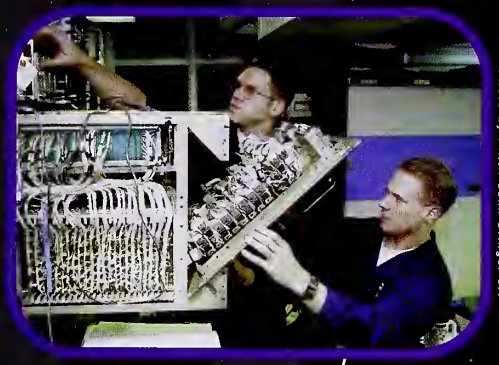


Photo by PHAN John Bringer Jr.

AEAN Richard Velte (right), from Cranberry, Pa., troubleshoots a radio frequency test bench with the help of AE3 Jose Miller, from Murfreesboro, Tenn.



Photo by PHAN John Bringer Jr.

AEAN Ryan D. Heier, repairs a relay rack from an F-14 *Tomcat*.

AE3 Chris Mize, from El Campo, Texas, installs a radar transmitter in an F-14 *Tomcat* .

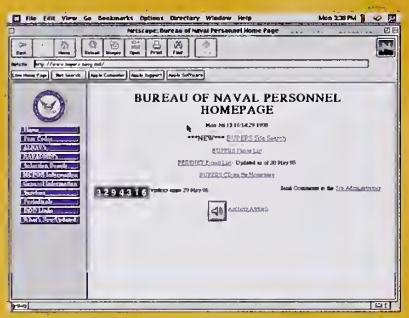


Photo by PH3 Cynthia R. Zarate

cybersailor@mediacen.navy.mil

Cyber Sailor

Detailing Online



BUPERS website

So, how did you do on the last advancement exam? Did you get promoted? You don't know? Well, don't you think you ought to find out? Put down that phone and get on your computer – the quickest way to find out is through the Bureau of Naval Personnel (BUPERS) homepage. I know, I didn't believe it at first either, but it's true. BUPERS has put together quite a website – and it just may be the most important one you'll ever visit.

Since this month's magazine is focusing on BUPERS, I decided to investigate their website (for something other than my detailer's e-mail address) and what I found surprised even me. There aren't too many bells and whistles, but the BUPERS site is rich with information – and isn't that what the information superhighway is all about?

Located at **www.bupers.navy.mil**, the BUPERS website (maintained by Data Processing Chief Donald Reese, DP2 Robert J. Capps and Radioman 2nd Class (PJ) Sidney L. Pearl) tracks a high number of visitors, offering every Sailor in the fleet information on every BUPERS code from PERS 00 (Chief of Naval Personnel) to PERS 09 (Naval Reserve Personnel Management).

You can also download the MCPON's monthly publication, *Direct Line*, and other valuable pubs like *Link*, *Shift Colors* and *Perspective* – as well as all BUPERS Instructions and manuals, such as the Military Personnel Manual, the Enlisted Transfer Manual and the Uniform Regulations Manual (these online manuals are very easy to use and mimic the printed versions).

The BUPERS site contains hundreds and hundreds of pages covering topics ranging from the Medical Enlisted Commissioning Program, nutrition and weight control to promotion, appointment and advancement lists for E-4 to O-6 – for both active and reserve Sailors.

The best thing about the site is the access it affords you, the user. You can get anywhere in the entire command. Heck, you could spend days looking at all of the 1996-98 NAVADMIN or ALNAV messages (if you really, really wanted to).

But what really impressed me about the BUPERS site was their innovation and forward thinking. For example, BUPERS has developed several online tools to help guide junior Sailors through their first enlistment – tools like the Goal Card. This neat, pocket-size card provides information on educational opportunities, training, advancement, and jobs. It serves as an individualized, personalized career planner for the first-term enlistee and can be filled out online at BUPERS.

BUPERS may have moved to Millington, Tenn., but they are still only a click away. Get online at the BUPERS website and see what they have to offer.

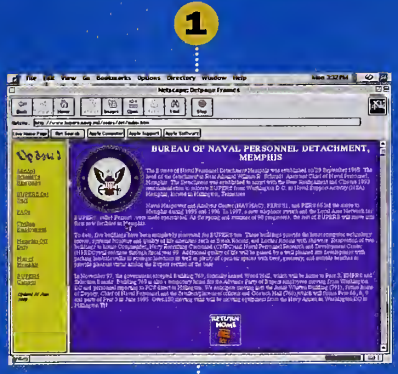
Southern Net

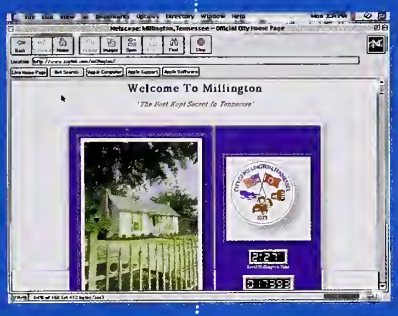
So BUPERS has moved. But, what do you know about Millington, Tenn.? Nothing? Well, let's get on the net and take a look.

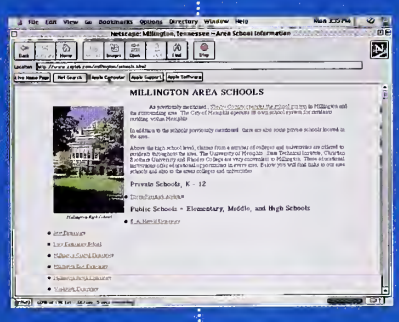
Millington, located 20 miles from Memphis along U.S. Highway 51, is easily accessed by Interstates 40, 240 and 55, in northern Shelby County. To get acquainted, your first virtual stop should be at the BUPERS detachment page 1) (www.bupers.navy.mil/codes/det/index.htm) which describes the new location and even provides maps of Memphis and the surrounding area. Your next stop should be Millington's official website at 2) www.zaptek.com/millington. This site has overall information on everything from local schools 3) (www.zaptek.com/millington/schools.html) and churches to local hotels 4) (www.zaptek.com/admiralty/index.html) and museums.

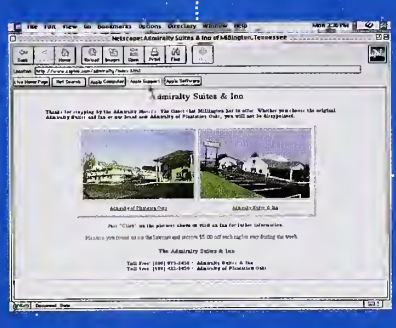
Even the town's local newspaper is online at 5) www.zaptek.com/millington/star.html.

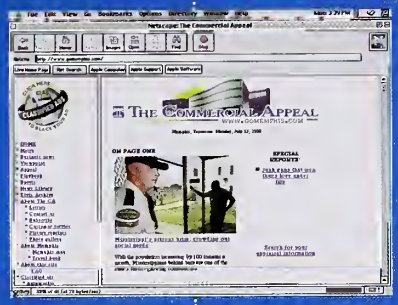
These sites provide excellent information and links to other pages on the surrounding area, such as the official Memphis website at 6) www.ci.memphis.tn.us and the Elvis archive at the Commercial Appeal website at 7) www.gomemphis.com.



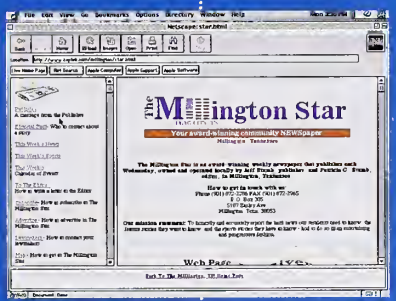












Eye on the Fleet

EYE ON THE FLEET is a monthly photo feature sponsored by the Chief of Information Navy News Photo Division. We are looking for HIGH IMPACT, quality photography from SAILORS in the fleet, to showcase the American Sailor in ACTION.



SUB SURFING

Members of SEAL Team 2 conduct SEAL Delivery Vehicle training in the Caribbean. Photo by PH1(DV) Andy Mckaskle

SPECIAL DELIVERY

Sailors on board USS *Santa Barbara* (AE 28) position transferred cargo during an underway replenishment with USNS *Saturn* (TAFS 10). Photo by PH2 Gloria J. Barry





CLOSE-UP

PH3 Steven Massone uses a telephoto lens to capture images on the flight deck of USS *John C. Stennis* (CVN 74). Photo by PHAN Robert Baker

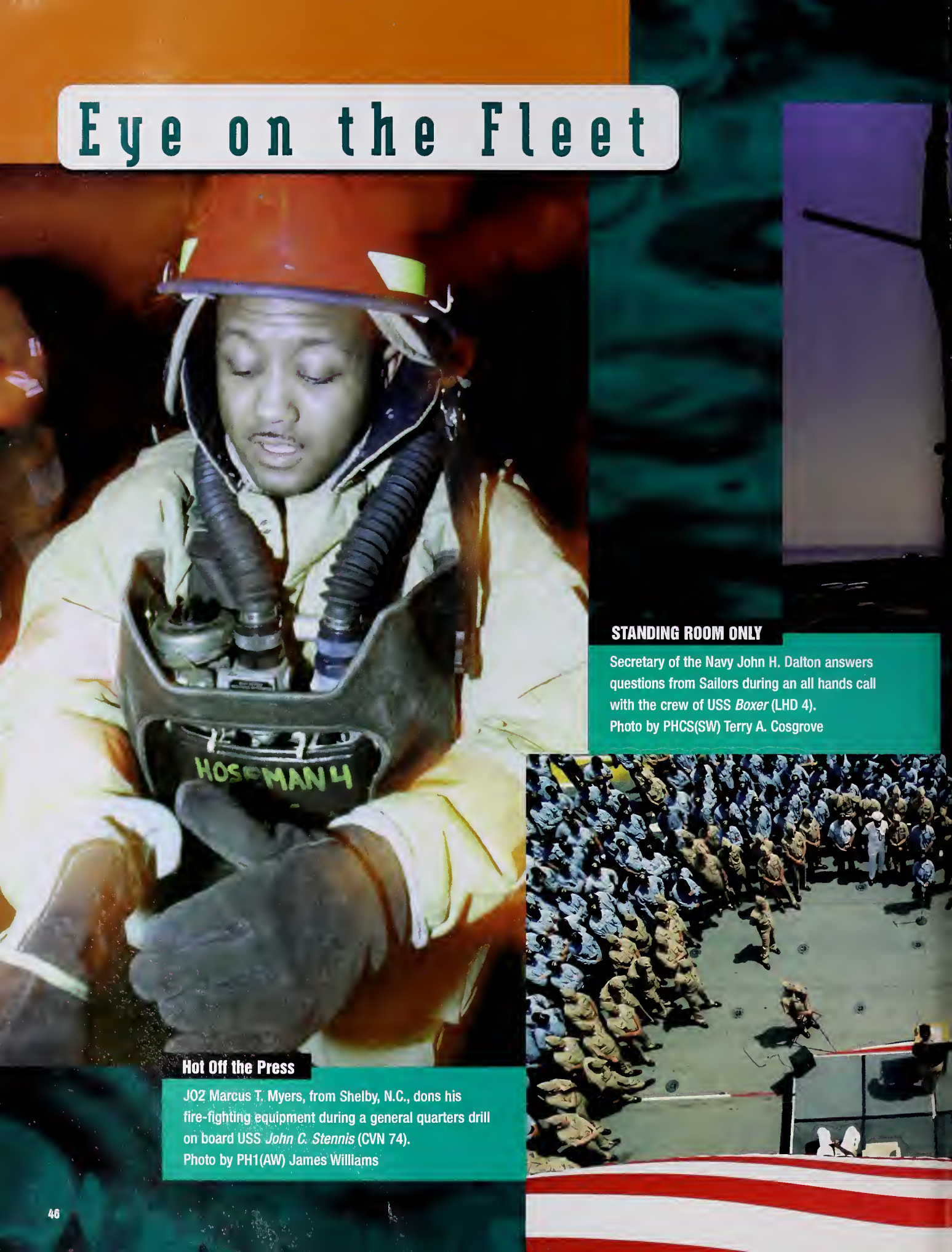


To be considered, forward your images with full credit and cutline information, including: full name, rank and duty station. Name all identifiable people within the photo and include important information about what is happening, where the photo was taken and the date.

Commands with digital photo capability can send attached .jpg files to: navynewsphoto@hq.navy.mil.

Mail your submissions to:
NAVY NEWS PHOTO DIVISION, NAVSTA ANACOSTIA, BLDG 168, 2701 S. CAPITOL ST. S.W., WASHINGTON, D.C. 20373-5819

Eye on the Fleet

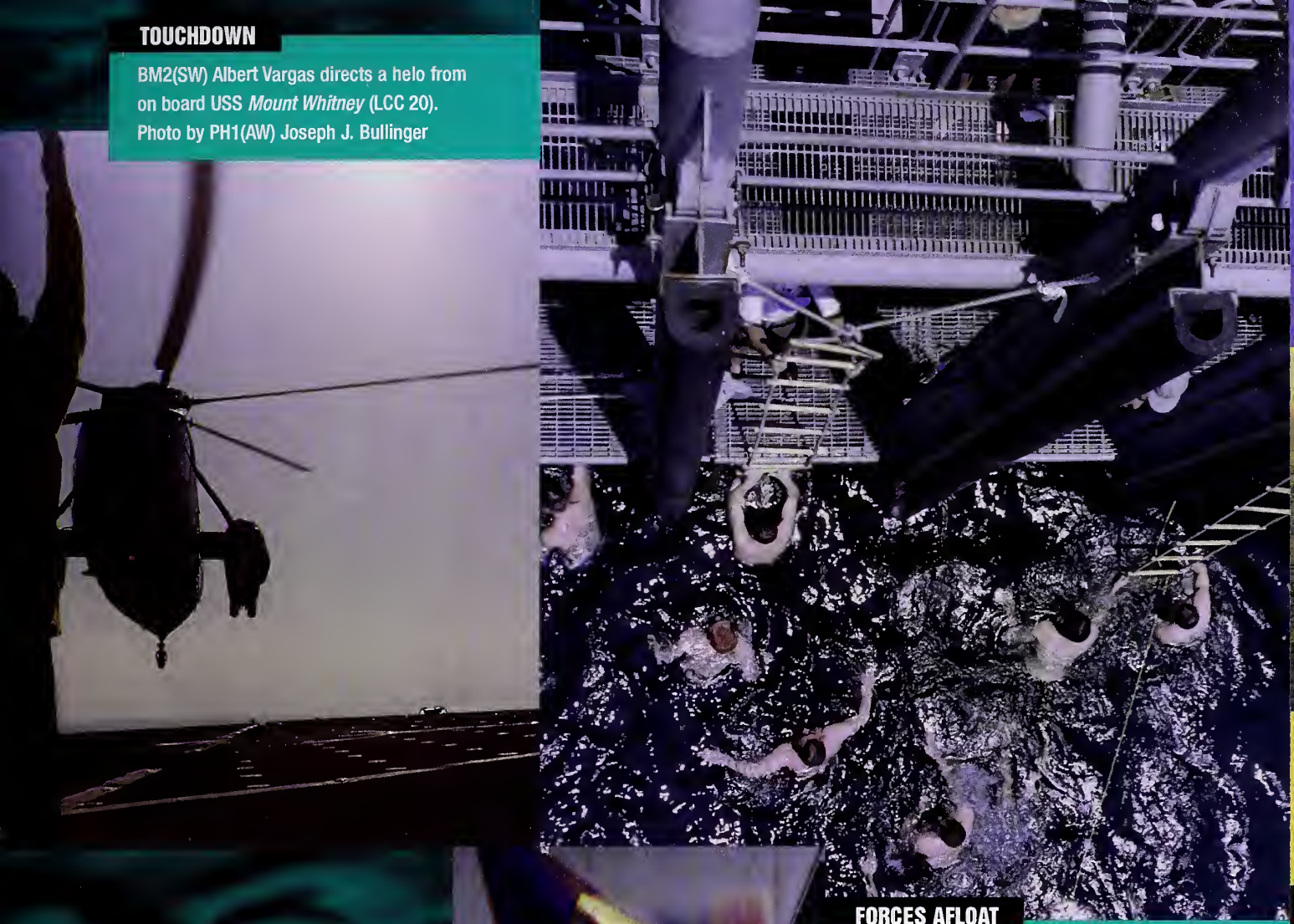


STANDING ROOM ONLY

Secretary of the Navy John H. Dalton answers questions from Sailors during an all hands call with the crew of USS *Boxer* (LHD 4).
Photo by PHCS(SW) Terry A. Cosgrove

Hot Off the Press

JO2 Marcus T. Myers, from Shelby, N.C., dons his fire-fighting equipment during a general quarters drill on board USS *John C. Stennis* (CVN 74).
Photo by PH1(AW) James Williams



TOUCHDOWN

BM2(SW) Albert Vargas directs a helo from on board USS *Mount Whitney* (LCC 20).
Photo by PH1(AW) Joseph J. Bullinger

FORCES AFLOAT

Sailors aboard USS *John C. Stennis* (CVN 74) look on as some of their shipmates enjoy swim call while on station in the Arabian Gulf.
Photo by PH1(AW) James M. Williams





FAREWELL COLORS

The Color Guard retires the colors following a burial-at-sea held on board USS *John C. Stennis* (CVN 74) while underway in the Arabian Gulf.
Photo by PHAN(SW) Robert Baker

Shipmates



Personnelman 2nd Class (SW) **Paul K. Spokas**
was selected as 1997 Sailor of the Year for Transient Personnel Unit, Great Lakes, Ill. Spokas helped maintain transient legal processing timelines, resulting in significant pay and allowance cost savings. Spokas also serves as the command public affairs officer and coordinates command volunteer efforts with various agencies in Lake County, Ill.



Interior Communications Specialist 1st Class (SW)
Douglas E. Cole
was selected as 1997 Military Student of the Year at Naval Station Mayport, Fla. Cole is assigned to Shore Intermediate Maintenance Activity, Mayport, where he is the shop supervisor for the repair department's interior communications division.



Aircrew Survival Equipmentman 1st Class (AW)
Kevin A. Strong
was selected as 1997 NAS Joint Reserve Base (JRB) Fort Worth Sailor of the Year. Strong successfully relocated the Aviation Life Support Systems (ALSS) from NAS Dallas to NAS JRB Fort Worth with only six assigned personnel and no down time. The ALSS contains more than 300 pieces and 20 tons of equipment, system tracking computers and tools.



Aviation Warfare Systems Operator 1st Class (AW)
Jody L. Taylor
was selected as 1997 Instructor of the Year for Fleet Aviation Specialized Operational Training Group Pacific, Det. Atsugi. Taylor taught 205 students throughout the calendar year in various computer courses ranging from operating systems introduction to Microsoft Office applications. Taylor also earned his designation of Master Training Specialist.



Draftsman 1st Class (SW) **William Wolfe**
was selected as 1997 Sailor of the Year for the Navy and Marine Corps Intelligence Training Center, Dam Neck, Va. As command illustrator and draftsman, Wolfe designed presentations for command, regional and national briefings. Wolfe also volunteered his time as assistant education services officer and as fitness coordinator for the "A" School's morning PT program.



Mess Management Specialist 1st Class **Neil V. Coffman**
was selected as 1997 Sailor of the Year for Puget Sound Naval Shipyard. Coffman, assigned as the leading petty officer for the Military Support Office, provided outstanding administrative support while coordinating the preparation and submission of more than 1,000 performance evaluations.

Did you know?

The color we know today as khaki originated in 1845 in India where British soldiers' soaked their white uniforms in mud, coffee and curry powder to blend in with the landscape. Khakis made their debut in the U.S. Navy in 1912 and were worn only by naval aviators until 1931 when they were adopted for submarines. In 1941 they were approved for wear by all officers and chiefs.

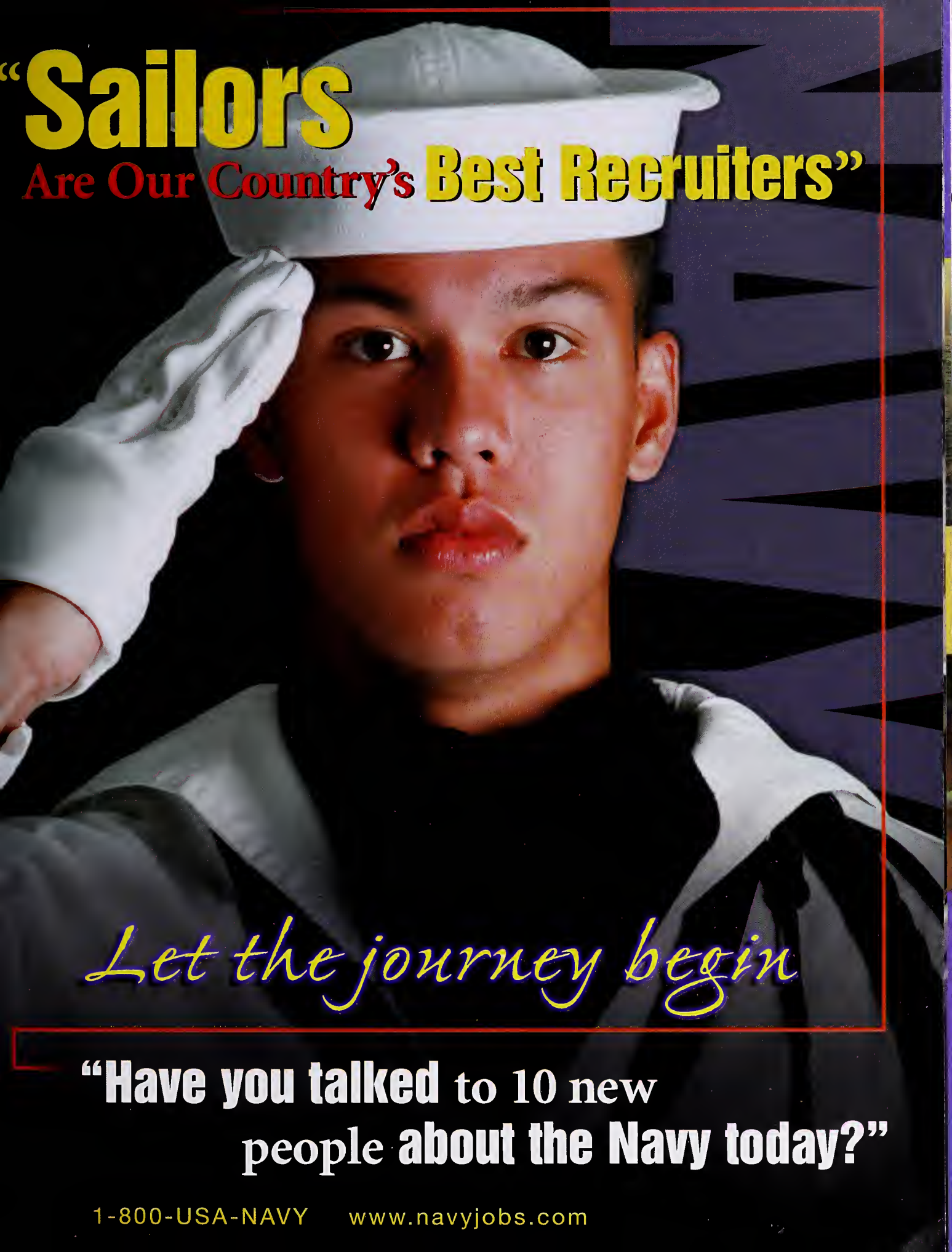
From 1841 until the practice was disestablished April 2, 1949, several ratings wore their patches on their right arm. For example, during WWII, boatswain's mates, turret captains, gunner's mates, fire controlmen, quartermasters, minemen and torpedomen's mates all wore their badges on their right sleeve.

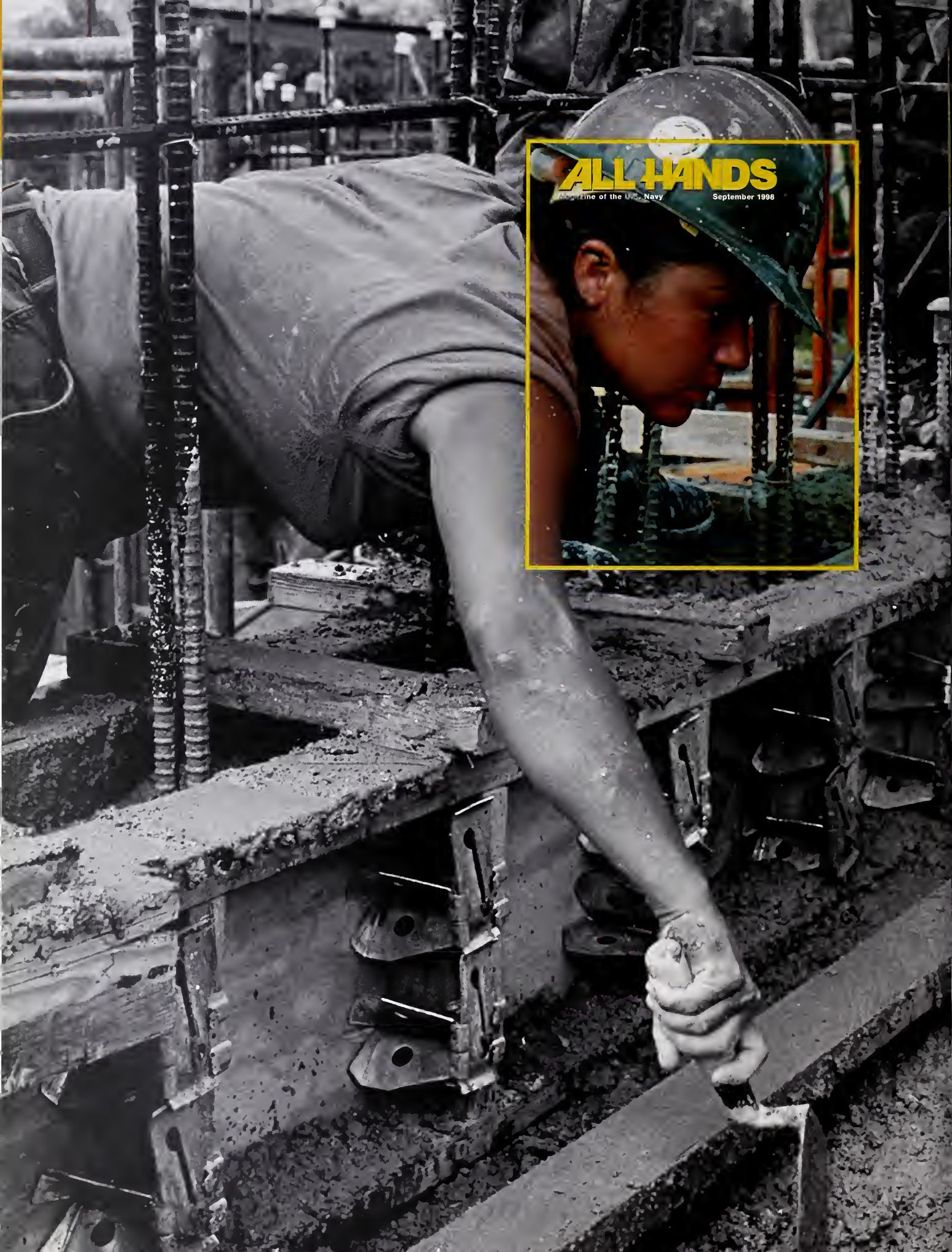
The cutlass – a short saber with a cut and thrust blade and a large hand guard – was issued to enlisted men as a sidearm and maintained in ships' armories until the beginning of WWII. The weapon was officially declared obsolete in 1949.

Bell-bottomed trousers were introduced in 1817 to permit Sailors to roll them above the knee when washing down the deck. The cut also made it easier for Sailors to remove the pants when forced to abandon ship or when washed overboard.

There is no relationship between the 13 buttons on the men's winter dress blue jumper and the 13 original colonies. Before 1894, the trousers had only seven buttons. It wasn't until the broadfall front was enlarged that the 13 buttons were added to the uniform and only then to add symmetry to the design.

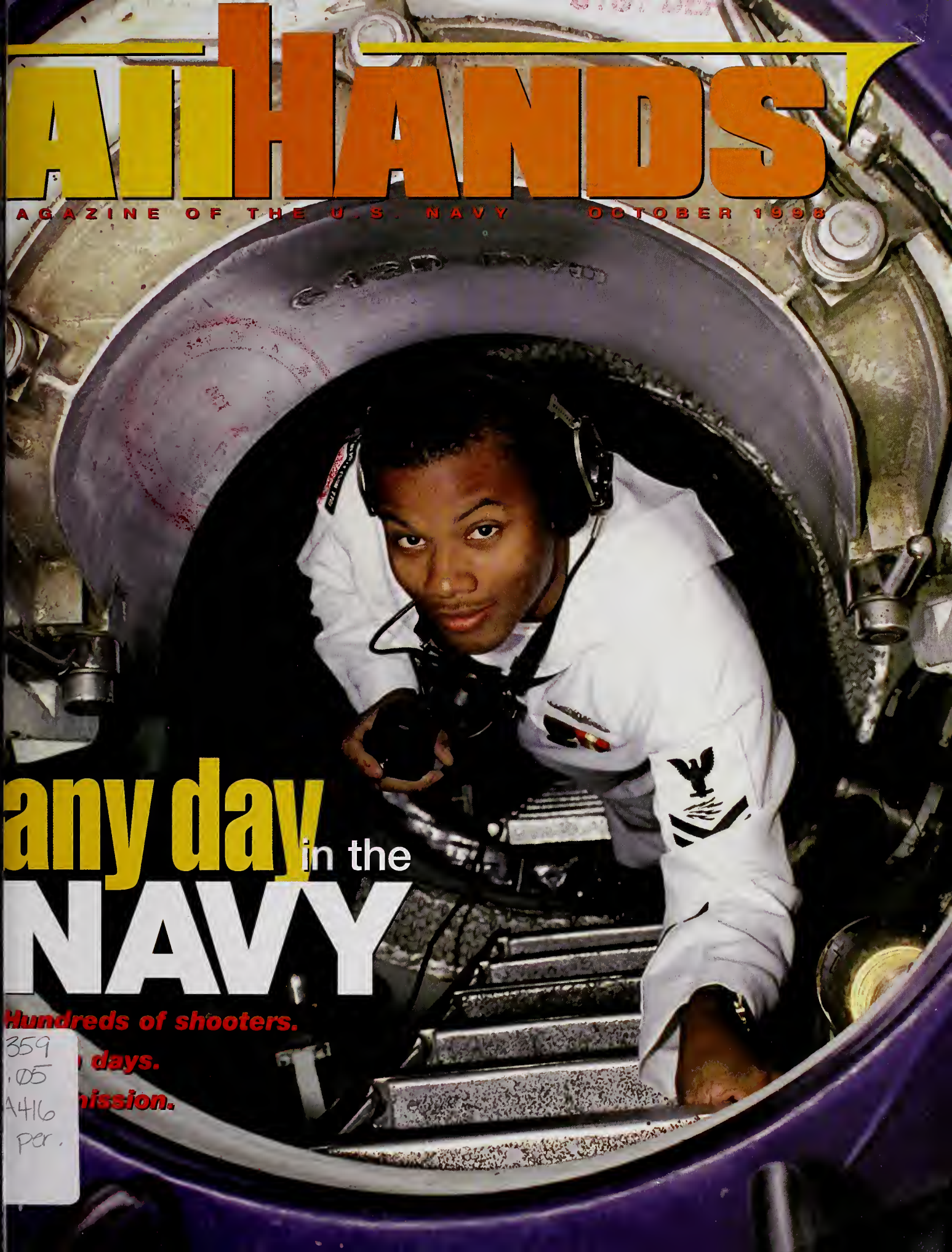
The distinctive jumper flap on Sailors' summer dress whites and winter dress blues originated as a protective cover to prevent the grease and powder seamen used to keep their hair in place from staining their jackets.


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ALL HANDS
September 1998

All HANDS

AGAZINE OF THE U.S. NAVY OCTOBER 1998

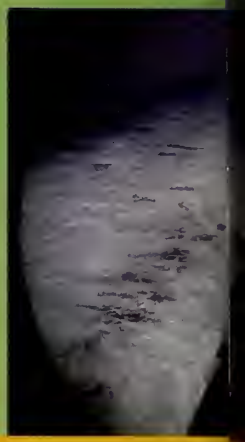


any day in the NAVY

Hundreds of shooters.
days.
mission.

359
.05
A416
per.

The week of May 4th, 1998, was a typical one for the United States Navy. During that week, more than 50 percent of its 341 ships were underway, and 94 of those were forward deployed. The Navy participated in 10 exercises, steamed over tens of thousands of nautical miles, launched and recovered hundreds of aircraft, conducted countless shipboard drills, and generally helped keep the peace in this turbulent world of ours. Then, the following week, more than 380,000 American



Any Day in Anywhere

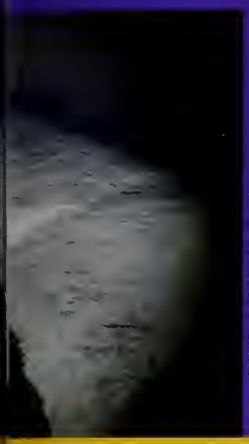


Photo by JO3 Joaquin Juatai

Sailors got up and did it all over again. Come to think of it, such a week was *anything* but typical.

But that's the way it has always been for the U. S. Navy - doing the incredible, beating the odds. Was it typical for a vastly out-gunned John Paul Jones to force the surrender of HMS *Serapis* off Flamborough Head? Did the men of Admiral Farragut's fleet expect to be ordered into a heavily defended Mobile Bay? How about the Sailors aboard the destroyer USS *Frankford* (DD 497) during the Normandy invasion – could you call it standard procedure for them to place their ship a mere 800 yards off Omaha Beach, exposing themselves to enemy fire





while blasting away at German emplacements? Well, in a way, the answer is "yes." Though dramatic, these examples typify the kind of people who have worn – and who wear today – the uniform of an American Sailor. It is not a duty to be taken lightly, not a calling to be carelessly answered.

The seven days between May 4th and May 10th have now passed into history, but the accomplishments of that week speak volumes about today's Navy and today's Sailors. Standing on the broad shoulders of



the Navy in the World



their forebears, they are Sailors committed to shaping a brighter future. Though mindful of where they have been, they keep their eyes on new horizons. Through the photographs that follow, you'll get a glimpse of them – learning, working, training and serving. You'll see that, while no battles were fought in May of 1998, these Sailors were ready to do so if called upon.

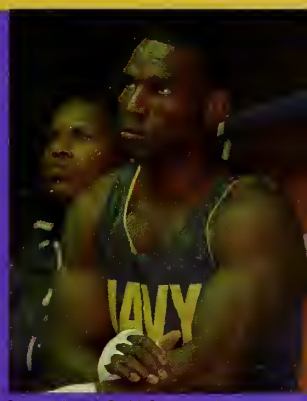


Photo by [illegible] Todd Cichonowicz



Thousands of submissions were received for this year's Any Day in the Navy issue, and the task of whittling them down was daunting. The staff of *All Hands* greatly appreciates the efforts of everyone who took the time to help document this incredible week, this *typically* incredible week.



On the Cover: ET2(SS) Shawn Hunter from Meadville, Pa., mans the sound-powered phones on board USS *Bremerton* (SSN 698) during a change-of-command ceremony.
Photo by PH2(AW) James Weber

On the Back Cover: AN Sarah Tunnicliff from Lansing, Mich., and AN Joseph Wiley from El Paso, Texas, eagerly await liberty call as USS *Carl Vinson* (CVN 70) pulls into San Diego.
Photo by PH2 Christoper Brown



▲ Search and Rescue (SAR) Swimmer AW3(NAC) Bradley Gravitt from Unityville, Pa., is hoisted into a helo following an exercise off the coast of San Diego.
Photo by PH3 Christopher Holladay



▶ HM2(AW) Scott Nelson from Spring Green, Wis., handles the controls as ENS Andrew Hayes from Muskego, Wis., experiences 7.5 Gs in the centrifuge at Naval Air Station Lemoore, Calif.
Photo by PH1(SW) Brad C. Dillon

"I wish to have no connection with any ship that does not sail fast for I intend to go in harm's way."

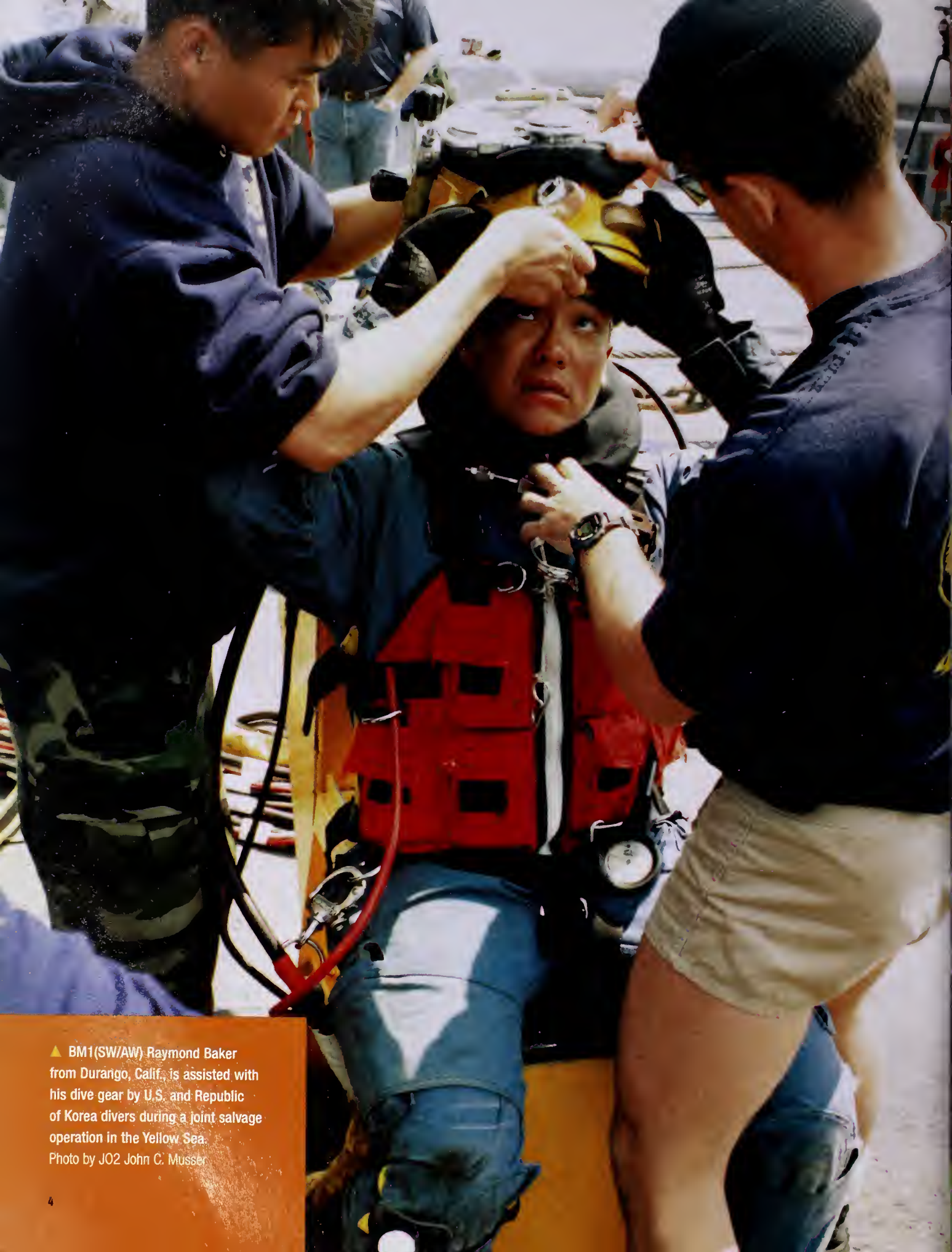
–John Paul Jones



▲ Crew members of USS *Mobile Bay* (CG 53) enjoy the ride during sea-trial, high-speed turns.
Photo by LTJG John D. Pickett

▶ HM3(FMF) Lonnie Barnes from Chowchilla, Calif., waits on the dive platform as LT Paul Rasmussen from San Tee, Calif., gets pulled toward the pool in a simulated parachute drag at Naval Air Station Lemoore, Calif.
Photo by PH1(SW) Brad C. Dillon

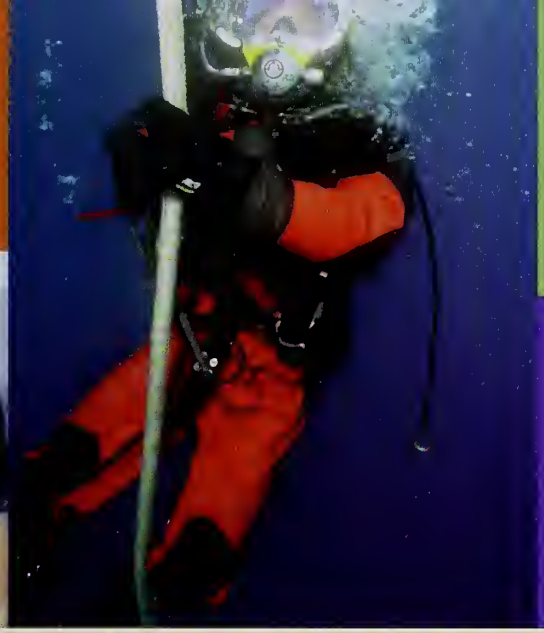




▲ BM1(SW/AW) Raymond Baker from Durango, Calif., is assisted with his dive gear by U.S. and Republic of Korea divers during a joint salvage operation in the Yellow Sea.
Photo by JO2 John C. Musser



▼ DT3 Rosé Fabricios from Auckland, New Zealand, stationed at the Naval Postgraduate School, Monterey, Calif., inspects the X-rays of a patient.
Photo by JO1 Diane Jacobs



◄ EO3(DV) David Townsend, a member of Underwater Construction Team 1, releases air from his dry suit during his ascent from a 190-foot dive after installing an outfall pipe in Souda Bay, Crete.
Photo by PH2(SW/DV) Eric J. Tilford

"I can imagine no more rewarding career. And any man who may be asked in this century what he did to make his life worthwhile, I think can respond with a good deal of pride and satisfaction: 'I served in the United States Navy.'"

–John F. Kennedy



◄ USS *Carl Vinson* (CVN 70) conducts a high-speed turn during the ship's Inspection and Survey (INSURV).
Photo by PH3 Chrisopher Hollaway



◀ Aircraft from Carrier Air Wing 7 (CVW-7) fly the delta formation over USS *John C. Stennis* (CVN 74) during operations in the Arabian Gulf.
Photo by PH3 Mike Larson

▼ MM1 John Babcock from Jackson, Miss., inspects the fire box on the No. 2 boiler with a boiler inspection device (BID) during a recent underway period aboard USS *Kitty Hawk* (CV 63). The BID is used to check for unburned fuel prior to lighting off the boilers.
Photo by PH2 John Collins

"A good Navy is not a provocation to war. It is the surest guarantee of peace."

–Theodore Roosevelt





▲ AW2 John T. Bergh from Jacksonville Beach, Fla., jumps from an SH-60 *Seahawk* helicopter assigned to Air Test and Evaluation Squadron 1 (VX-1) during a practice search and rescue exercise at Naval Air Warfare Center Patuxent River, Md. Waiting in the water to be "rescued" is AWC(AW) Robert H. Wickes Jr. from Baton Rouge, La.
Photo by Fern Flanary



▲ PH2 Joseph Wilson from Bradley, Fla., pays his respects to the late Chief of Naval Operations ADM Jeremy "Mike" Boorda at Arlington National Cemetery in Virginia.
Photo by PH2 James E. Finnigan



▲ Sailors prepare to enter the cockpit of an AV-8B *Harrier* during a flight-deck fire drill aboard USS *Boxer* (LHD 4).
Photo by PH2 Chris Shimana



◄ On board USS *John F. Kennedy* (CV 67), AC2 Susan Clapp from Dalton, Ga., sets up a radar scope prior to flight operations.
Photo by PH3 Christian Eskelund

"This ship is built to fight. You'd better know how."

–Admiral Arleigh Burke



▲ SN Jonathan Price from Mobile, Ala., serves lunch on board USS *Frederick* (LST 1184).
Photo by PH3(NAC) David C. Mercil



► USS *Fitzgerald* (DDG 62) and USS *Oldendorf* (DD 972) moored at Pier 6, Naval Station San Diego.
Photo by PH2 Ted Banks

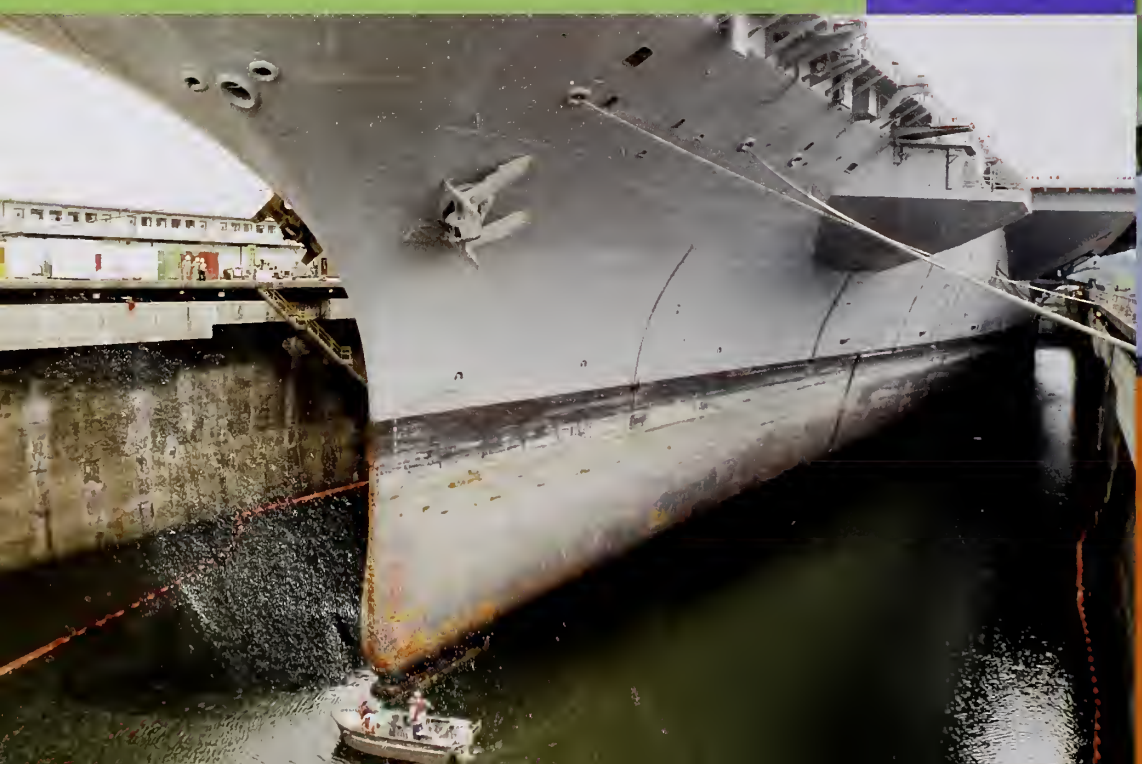


◀ EO2 Terry Cape from Conchas Dam, N.M., watches as his daughter Kristen enjoys the "frog slide" at the MWR Water Park at Naval Air Station Key West, Fla. The Seabees of Naval Construction Battalion Unit 402 constructed and installed picnic pavilions, shade structures, playground equipment, lights and five water slides for the park.
Photo by LT Gordon Jansky

"Summer seas and a good ship– life has nothing better."

–Mark Twain

▼ USS *Constellation's* (CV 64) Commanding Officer, CAPT Donald K. Bullard, inspects the bow of the carrier upon arrival at the dry dock at Puget Sound Naval Shipyard, Bremerton, Wash. The ship is undergoing repairs before her next deployment in early 1999.
Photo by PH3 Timothy Ward





▲ USS *John C. Stennis* (CVN 74) Sailors battle for a rebound.
Photo by PH3 Mike Larson



▲ **SN Michelle Raz from Wasco, Calif., stands lookout on the signal bridge of USS *Carl Vinson* (CVN 70).**
Photo by PHAN Kristina Harrelson



◀ LCDR Ray Emerson strides around the track at Naval Air Station Norfolk.
Photo by PH1 Todd Cichonowicz

"Control of the seas means security. Control of the seas means peace. Control of the seas can mean victory. The United States must control the sea if it is to protect our security."

–John F. Kennedy



▲ MA3 Creighton Archie from Baton Rouge, La., stands by to perform evening colors on the fantail of USS *Kitty Hawk* (CV 63).
Photo by PHC Mahlon K. Miller



▲ ETSN(SS) Allan Cox from Tualatin, Ore., and MM2(SS) Paul Dean from Pearl Harbor, stand topside watch on board USS *Honolulu* (SSN 778) while anchoring for a port call in Lahaina, Hawaii.
Photo by PH2(SW) Arlo K. Abrahamson



▲ **PH2(AW) Dwayne Smith from Brooklyn, N.Y., inspects negatives at the Office of Naval Intelligence, Washington, D.C.**
Photo by PH2 Ken Brown



▲ **MM1(SS) Robert Kulhanek from Ypsilanti, Mich., prepares to combat a simulated compartment fire at Submarine Training Facility Norfolk.** Photo by JO2 Anthony Falvo





◀ FC1(SW) Joel Conrad from Springfield, Md., discusses the procedure for performing head alignments on the AN/UYH-3 Disk Drive Unit. The unit is part of the AEGIS Weapons System used on board Navy AEGIS cruisers and destroyers. Conrad is a computer instructor at the AEGIS Training and Readiness Center, Dahlgren, Va. Also pictured: (left to right) FCSN Sharon Garofalo from Syracuse, N.Y., FCSN Audra Rohe from Anoka, Minn., and FC3 Shawn Hughes from Jacksonville, Fla.
Photo by PH1 Steven Cooke

"Fight her 'till she sinks and don't give up the ship."

–*Captain James Lawrence* of USS *Chesapeake*, as he was carried below, mortally wounded, in his losing fight with HMS *Shannon*, June 1, 1813

▲ AW2(NAC) Bubba Norris from Jefferson, Ga., prepares for landing on board USS *Carl Vinson* (CVN 70).
Photo by PH3 Christopher Hollaway

▶ MN2 Donna Oglesby from Colorado Springs, Colo., and her son, Bryan, share a pastry during "Snack-with-Your-Kid Day" at the Child Development Center at Naval Air Station Pensacola, Fla.
Photo by JOSN Stacee James





◀ SMSN Jason Albers from Hudson, Wis., signals for an underway replenishment on board USS *Independence* (CV 62). Photo by PHAN Chris Howell



"It rests with us to make the traditions and to set the pace for those who are to follow and so upon our shoulders rests a great responsibility."

–*Esther Voorhees Hasson,* First Superintendent, Navy Nurse Corps, 1908



▲ Dr. Edward Williams, command physician for Military Entrance Processing Station (MEPS) Jacksonville, Fla., conducts a preliminary examination on 18-year-old Cornell A. Stephens of Brooks County, Ga. Stephens must pass an extensive physical to qualify for military service. Photo by PH2(AW/NAC) Anthony C. Casullo

◀ Sandy Lyle of the Family Service Center's New Parent Group at Naval Construction Battalion Center Port Hueneme, Calif., introduces McGruff the Crime Dog to Dalton Forrester and his mother, Randa, during a special Mother's Day visit. Photo by PHAN Erika E. Dugan



▲ Surgical Team 4 performs at sea. Pictured: (left to right) Dr. (CDR) Robert Chastanet from Wayne, N.J., HM3 George Lint Jr. from Greenville, S.C., and HM2 Jay Zulueta from Staten Island, N.Y. Photo by LCDR Rochelle Owens



▲ Catapult 2 spotter, ABHAN Jason Michael from Boneville, Mo., directs an S-3 *Viking* during flight operations on board USS *Dwight D. Eisenhower* (CVN 69).
Photo by LT Charles Albrecht



▶ Using a "transit" on the floating dry dock *Resolute* (AFDM 10), BM3 Bereatha R. Dawkins takes a deflection reading to ensure the undocking submarine, USS *Narwhal* (SSN 671), remains even as she is lowered into the water.
Photo by JOC Craig Grisoli

"The air fleet of an enemy will never get within striking distance of our coast as long as our aircraft carriers are able to carry the preponderance of air power to the sea."

–*Rear Admiral W. A. Moffett,* Chief of Navy Bureau of Aeronautics, 1922

▶ ENC(SW/DV) Brett Edgley from Tacoma, Wash., and BM2(SW/DV) Frank Crane from Niles, Wis., inspect a dry dock shelter for cleanliness and corrosion.
Photo by PH2(SW) Arlo K. Abrahamson



▼ On the bridge of USS *La Salle* (AGF 3), QM3 John Hawkes from Cansco, Maine, and QM3 Joe Radford from Monroe, Mich., review navigation charts during a General Quarters drill.
Photo by PH3 Renso Amariz





◀ On a typical morning in the Pacific Northwest, USS *Michigan* (SSBN 727) gets an assist from Navy tugs as she prepares to move from Delta Pier to Marginal Wharf at Submarine Base Bangor, Wash.
Photo by PH2 Brian Nokell

"I have not yet begun to fight."

–*John Paul Jones,* during engagement between *Bonhomme Richard* and HMS *Serapis,* September 23, 1779



◀ Working under a red safe-light, PH3 Aaron T. Englund develops a photograph in the darkroom on board USS *Wasp* (LHD 1).
Photo by PH3 Kenneth A. Pace



▲ On the flight deck of USS *La Salle* (AGF 3), YN2 Antonio Franklin (left) from Memphis, Tenn., and JO1 Patrick Lane from Cupertino, Calif., take a moment to laugh during *La Salle's* recent TSTA (Tailored Ship's Training Availability) II inspection. *La Salle,* flagship for Commander, U.S. 6th Fleet, is homeported in Gaeta, Italy.
Photo by PH3 Renso Amariz



▲ **SW2 Jeremy McCaslin from Red Bluff, Calif., assigned to Construction Battalion Unit 413, welds a base plate.**
Photo by CE3 Walter Drenkhahn



▲ SM3 Imelda Miller restows the "Oscar" flag after a man-overboard drill on board USS *John F. Kennedy* (CV 67). Photo by JO1(AW) Michael Hart





◀ ABE1 Anthony Hughes from Louisville, Ky., launches an S-3 *Viking* from the bow of USS *John C. Stennis* (CVN 74) during flight operations in the Arabian Gulf.
Photo by PHAN(AW) Robert Baker

"It is the function of the Navy to
carry the war to the enemy
so that it will not be fought on U.S. soil."
–Fleet Admiral Chester Nimitz

▲ PN3 Jesse Acevedo a Kalibo from the Republic of the Philippines, stationed at Naval Air Station Norfolk's Personnel Support Detachment, fields a phone call from a Sailor concerning his military record.
Photo by PHC Glen Downie

▶ UT2 George Fehrenbacher from Joliet, Ill., attached to Naval Support Activity Monterey Bay, Calif., tutors second-grader Errol Prowse at Monte Vista Elementary School as part of the "Saturday Scholars" program. Many Sailors and Marines in the Monterey Bay area spend their Saturday mornings tutoring local children.
Photo by Lance Cpl. Christina Johnson, USMC





▲ EO2 John Proffit from Joplin, Mo., a member of Construction Battalion Unit 410, fills a hole after recent digging was performed to assist environmental consultants in locating numerous tortoises at Naval Air Station Jacksonville, Fla.
Photo by PH2 Yon Kennon



◀ At Naval Special Warfare Center Coronado, Calif., BM3 Dave Kelly from Archbold, Ohio, carefully navigates the rope bridge at the BUD/S obstacle course during the 5th Annual Search and Rescue (SAR) Competition.
Photo by PH3 Bob Houlihan

"Each man must do all in his power for his country."

–Captain Issac Hull, USS Constitution, 1813



▶ Music students from Cranston-Calvert and Sheffield Schools in Newport, R.I., practice with MU3 Jennifer Steward from Rockland, Mass., as part of the Navy Band's Adopt-A-School Personal Excellence Program.
Photo by Ron Fontaine



▲ MM2(SS) Michael W. Wuerthele from Wilbraham, Mass., battles to repair a broken coupling inside the "wet trainer" at Submarine Training Facility Norfolk.
Photo by JO2 Anthony Falvo



▲ SN Omar Zevallos from New York City scans the moonlit horizon for surface contacts from on board USS *John F. Kennedy* (CV 67). Photo by PH3 Christian Eskelund



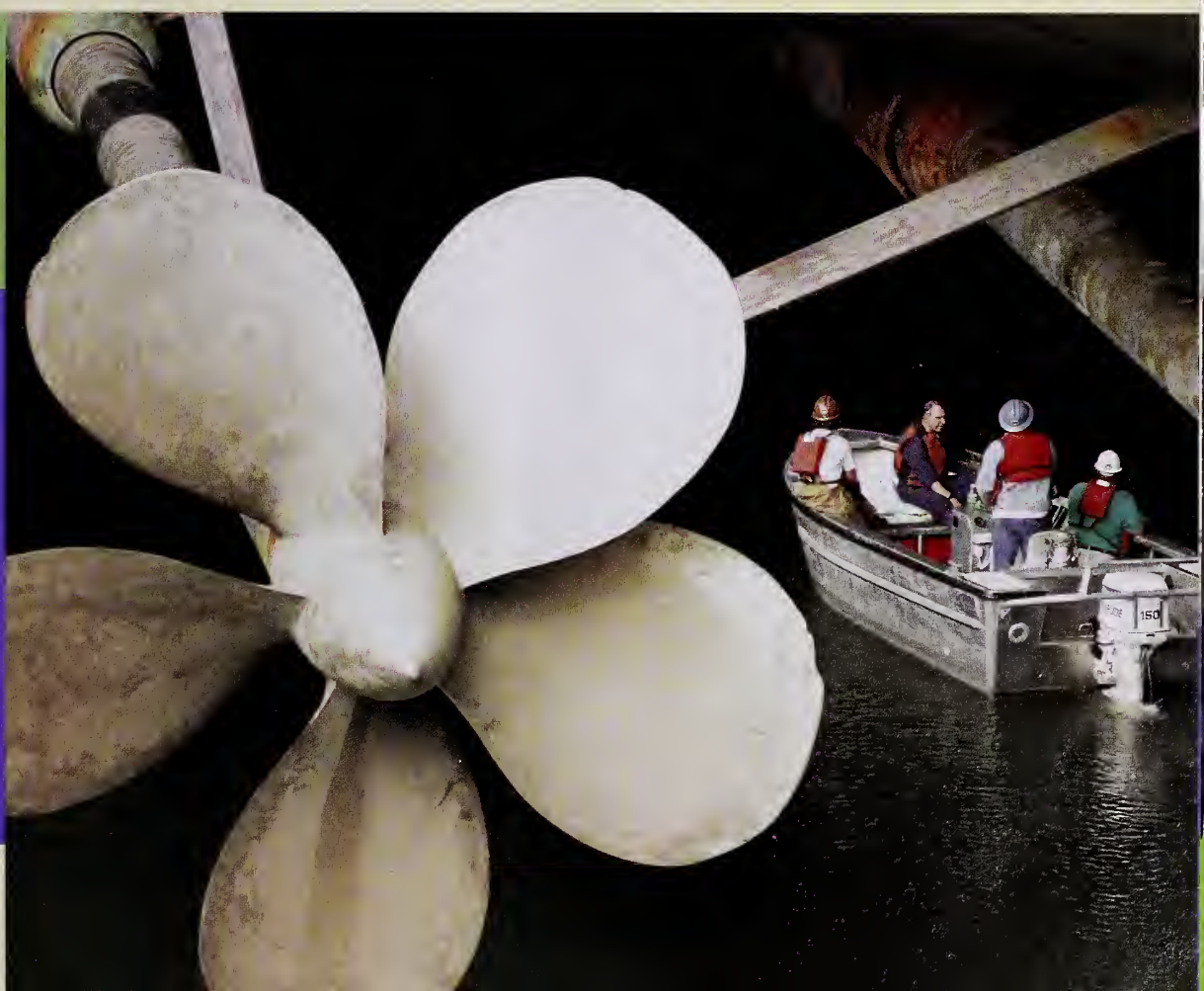
◀ Sailors on board USS *John C. Stennis* (CVN 74) distribute mail from the hangar bay during a recent mail call. Photo by PH3(SW) Steven Massone



▶ Sgt. Will LeGrand, USMC, from Florence, S.C., repairs a CH-53 *Sea Stallion* helicopter in the hangar bay of USS *Wasp* (LHD 1) during Operation *Destined Glory* in the Mediterranean Sea. Photo by PHAN Daniel Stokes

"Without a decisive naval force we can do nothing definitive, and with it, everything honorable and glorious."

–George Washington



▶ USS *Constellation's* (CV 64) Commanding Officer, CAPT Donald K. Bullard, inspects the stern of the carrier at Puget Sound Naval Shipyard, Bremerton, Wash. The ship is undergoing repairs before her next deployment in early 1999. Photo by PH3 Timothy Ward



◀ MS2 C.J. Morton from Broken Arrow, Okla., gets started on "break outs" aboard USS *Frederick* (LST 1184).
Photo by PH3(NAC) David C. Mercil



▶ MM3 Dolores Aguilar from El Paso, Texas, shares her candy with a young girl and her mother at a hospital in Massawa, Eritrea. Navy and Marine Corps volunteers completed general maintenance at the hospital during a recent port visit.
Photo by JOC(SW) Jim DeAngio

"When you cease to make a contribution, you begin to die."

–Eleanor Roosevelt



◀ HM2 Alex Velasco from Quezon City, Republic of the Philippines, conducts a CT scan at U.S. Naval Hospital Yokosuka, Japan.
Photo by PH1(AW) David S. Tucker



▲ HM3 Pep Paulo, a member of the Branch Medical Clinic at Naval Air Station Barbers Point, Hawaii, searches for a patient's medical record.
Photo by PH3 Laine Altshuler



▲ HN Adrian Figueroa from Victoria, Texas, assigned to the pediatric clinic at Naval Medical Center Portsmouth, Va., records a young patient's height before he is seen by the doctor.
Photo by Dan C. Gay



◀ Staff Sgt. Anthony Reeves, USMC, of the U.S. Navy Boxing Team participates in a bout with the Royal Logistic Corps Boxing Team at Naval Amphibious Base Little Creek, Va. Reeves is attached to Expeditionary Warfare Training Group Atlantic and is one of more than a dozen Sailors and Marines on the U.S. Navy Boxing Team.
Photo by PH1 Todd Cichonowicz

"Hit hard, hit fast, hit often."

–Admiral William "Bull" Halsey



▲ USS *George Washington* (CVN 73) transfers ammunition and fuel to USS *Arctic* (AOE 8) during a three-day, ammunition offload after a six-month Mediterranean Sea/Arabian Gulf deployment.
Photo by PH3 Sammy Dallal



▶ HM2 Robert Williams from Hastings, Fla., a radiology technician at U.S. Naval Hospital Yokosuka, Japan, reviews the results of a CT scan.
Photo by PH1(AW) David S. Tucker



During Operation *Cobra Gold '98* in Thailand, a Sailor for Naval Cargo Handling Battalion Group prepares heavy-duty cable for lifting marine equipment from MV (Motor Vessel) *1st LT Baldomero Lopez.*
Photo by PH1 Patrick Cashin

"Building slow destroyers! One might as well breed slow race horses."

–Sir Winston Churchill



Dr. (LT) Christopher Reed, an obstetrics and gynecology resident from Gaithersburg, Md., hands a newborn infant to Dr. (LCDR) James Woods, a neo-natologist from Buffalo, N.Y., as Dr. (LT) Laura Adams from Midland, Texas, who performed an emergency Caesarian section to bring little Rachael Lynn Arnold into the world, looks on. All three doctors are stationed at Naval Medical Center Portsmouth, Va.
Photo by LCDR Gary Ivey



▲ **Brenda Keffer and her best friend at the MWR stables at Naval Air Station Oceana, Va.**
Photo by PH2(SW) Adam Goodrich



▲ ST2(SS) Aaron M. Green, stationed on board USS *McKee* (AS 41), stands sentry duty at the entrance of Mike Pier in Pearl Harbor.
Photo by PH1 William R. Goodwin



During Operation *Cobra Gold '98* in Thailand, a Sailor from Naval Cargo Handling Battalion Group gives directions to a tractor operator on board MV (Motor Vessel) *1st LT Baldomero Lopez.*
Photo by PH1 Patrick Cashin

"Wherever the standard of freedom and independence has been or shall be unfurled, there will be America's heart, her benedictions, and her prayers."

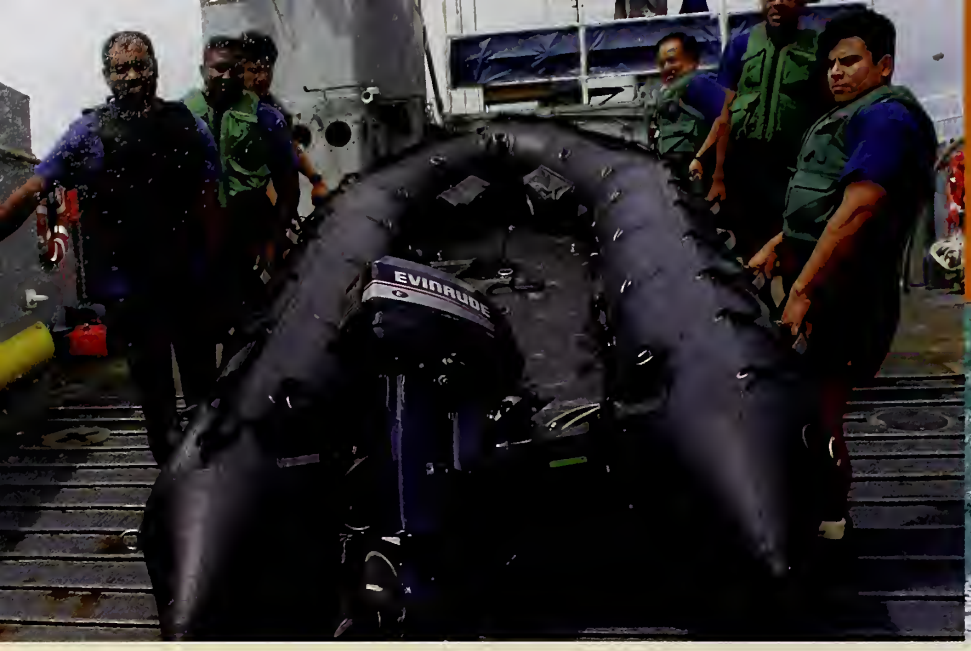
–John Quincy Adams



Sailors gather on the mess decks for a quick prayer before afternoon chow on board USS *John C. Stennis* (CVN 74).
Photo by PHAN James Farrally II



SN Manuel Morales from Orlando, Fla., shines the brightwork on the anchor chain brake wheel on board USS *Philippine Sea* (CG 58).
Photo by MM3 Christopher C. LaBarbera



◀ Crewmembers of Amphibious SEAL Delivery Vehicle 3 prepare for small boat operations in Pearl Harbor.
Photo by PH3 Steve Diamond

▼ LTJG Richard Cochran from Wayne, N.J., a member of Patrol Squadron 26 (VP-26), swims his physical readiness test at Naval Air Station Sigonella.
Photo by PH2 Robert Reynolds



"The Navy is much more than a job; much more than service to country. It is a way of life. It gets in your blood."

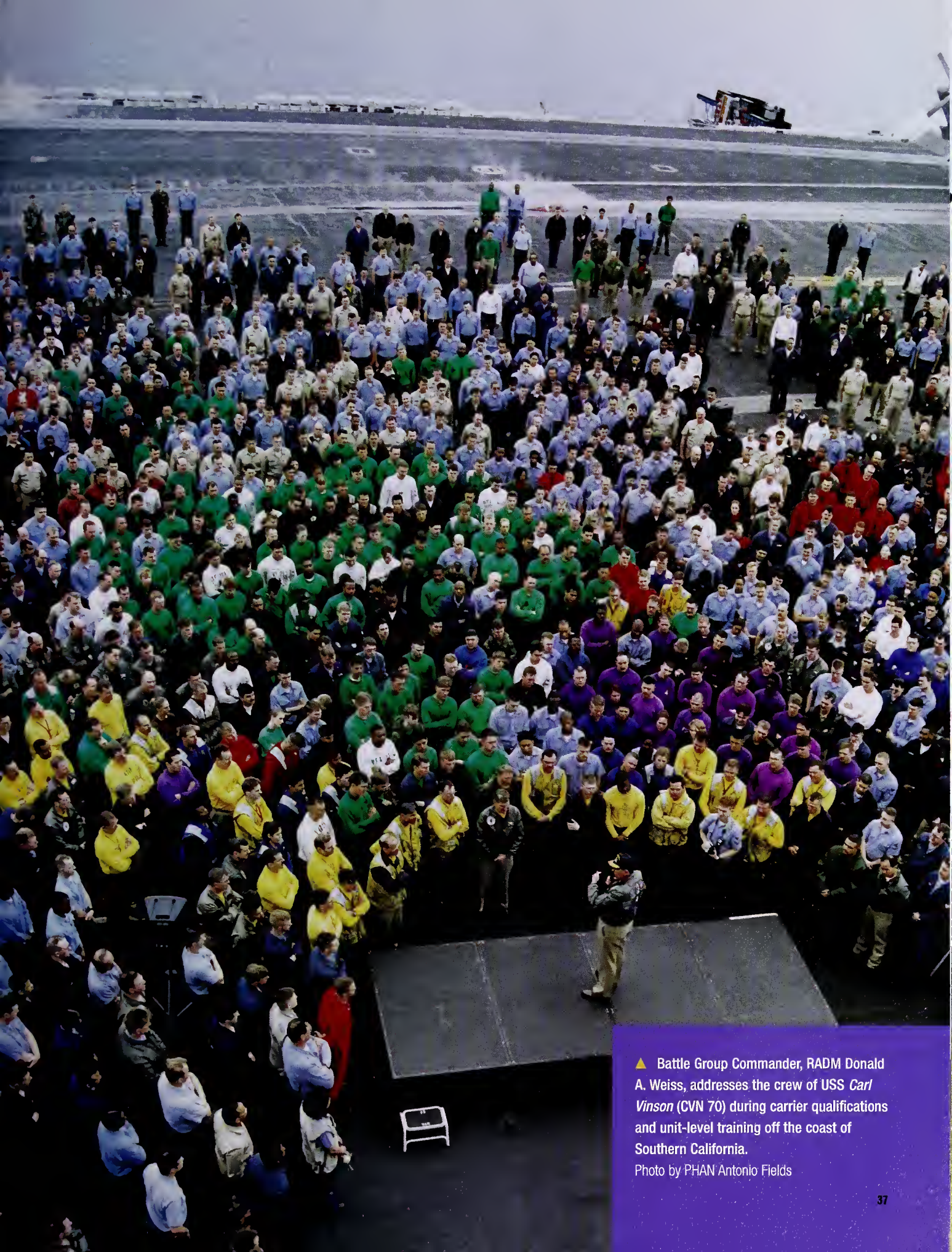
–*The Honorable Albert Pratt*, Assistant Secretary of the Navy, 1955

▶ BM2 Thomas Porr from Brooker, Fla., paints the starboard hull of USS *Mobile Bay* (CG 53) while homeported in Yokosuka, Japan.
Photo by LTJG John Pickett



▼ ENS Blair Swain from Tyler, Texas, sprints the final leg of the flight-gear run at the 5th Annual Search and Rescue (SAR) Competition in Coronado, Calif., as BM3 Dave Kelly from Archbold, Ohio, runs alongside calling out his time.
Photo by PH3 Bob Houlihan





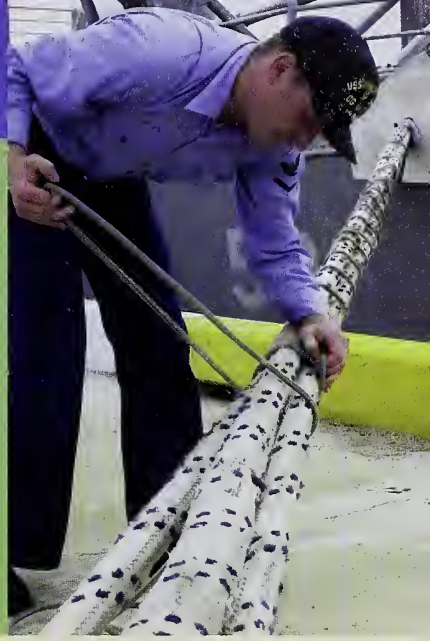
▲ Battle Group Commander, RADM Donald A. Weiss, addresses the crew of USS *Carl Vinson* (CVN 70) during carrier qualifications and unit-level training off the coast of Southern California.
Photo by PHAN Antonio Fields



▲ AN Armando Bravo from San Mateo, Calif., inspects USS *Carl Vinson's* (CVN 70) flight deck during a countermeasure washdown system test.
Photo by PH2 Christopher Brown



At Naval Station San Diego, a tugboat operator tosses a line from one tugboat to another in order to secure their position and double their strength.
Photo by PH2 Ted Banks



FC3 Chad Paulus from Alabaster, Ala., tends the lines of USS *Philippine Sea* (CG 58).
Photo by PH1 Brian Montgomery

A glance at a globe is all it takes to **appreciate the meaning of control of the sea** in the nuclear age."

–Admiral Arleigh Burke



BM1 Bill Mann from Paris, Tenn., directs cars onto Naval Air Station Sigonella, as a member of the Italian Carabiniere stands sentry duty.
Photo by PH2(AW) Kristopher G. Sheets



◀ MRFN Barbara Spraque from Vineland, N.J., sets a tool to face a brass test bushing on a vertical turret lathe in the machinery shop at Naval Submarine Support Facility New London, Conn.
Photo by PH2 Alan Warner



"If you do something once, people call it an accident. If you do it twice, they call it coincidence. But do it a third time and you've just proven a natural law." *–Rear Admiral Grace Murray Hopper*



▲ EN2(EOD) Michael D. Peters carefully cuts the trip wire of a PMR2-A anti-personnel mine during a training exercise.
Photo by ET3 Michael J. Tuttle

◀ BUC "Bear" McDaniel from Chattanooga, Tenn., stationed at Field Command Defense Special Weapons Agency Permanent High Explosive Test Site, White Sands, N.M., surveys the damage done by an advanced-penetrating weapon.
Photo by Charles B. Ward



▼ During a recent training exercise, stretcher bearers carefully prepare the "patient," DC2 Ronald Dodd, for transport from the hanger bay to medical on board USS *Boxer* (LHD 4).
Photo by PH1(AW) Les G. Waldenburg



▶ The Blue Angels' diamond formation sets up for the Diamond 360 Pass during a practice flight demonstration at Naval Air Station Pensacola. The photo is taken from the slot position, which is flown by Blue Angel #4, LT Mark Dunleavy from Virginia Beach, Va.
Photo by PH1(NAC) Casey Akins



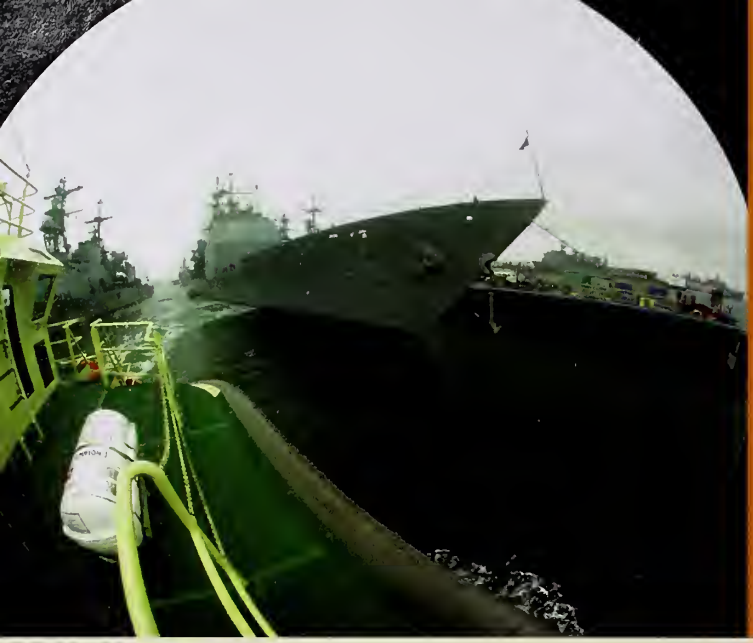
FCC(SW) James Brown, leading chief petty officer at the AEGIS Training and Readiness Center, Dahlgren, Va., inspects a Sailor's uniform. More than 1,000 students, enlisted and officer, will pass through the doors of this school prior to reporting to the fleet.
Photo by PH1 Steven Cooke

"Be the best, or don't get in the damn airplane."

–Captain Roy "Butch" Voris, USN (Ret)
First Flight Leader of the Blue Angels, 1946-1947



The ship's control party aboard USS *Philadelphia* (SSN 690) works together to accomplish the boat's mission. Pictured: (from left to right) YNSN Derek Pettit (helmsman) from Cincinnati; MMC(SS) Geoff Durbin (diving officer) from Danville, Ohio; ET3(SS) Thomas McGrew (stern planesman), from Bethalto, Ill.; MM1(SS) Robin Casper (chief of the watch/ ballast control), from Clinton, N.J.; and in back, ET1(SS) Anthony Chirillo (messenger) from Providence, R.I.
Photo by PH2 Alan Warner



◀ At Naval Station San Diego, a tugboat cruises past USS *Fitzgerald* (DDG 62) en route to her next job.
Photo by PH2 Ted Banks



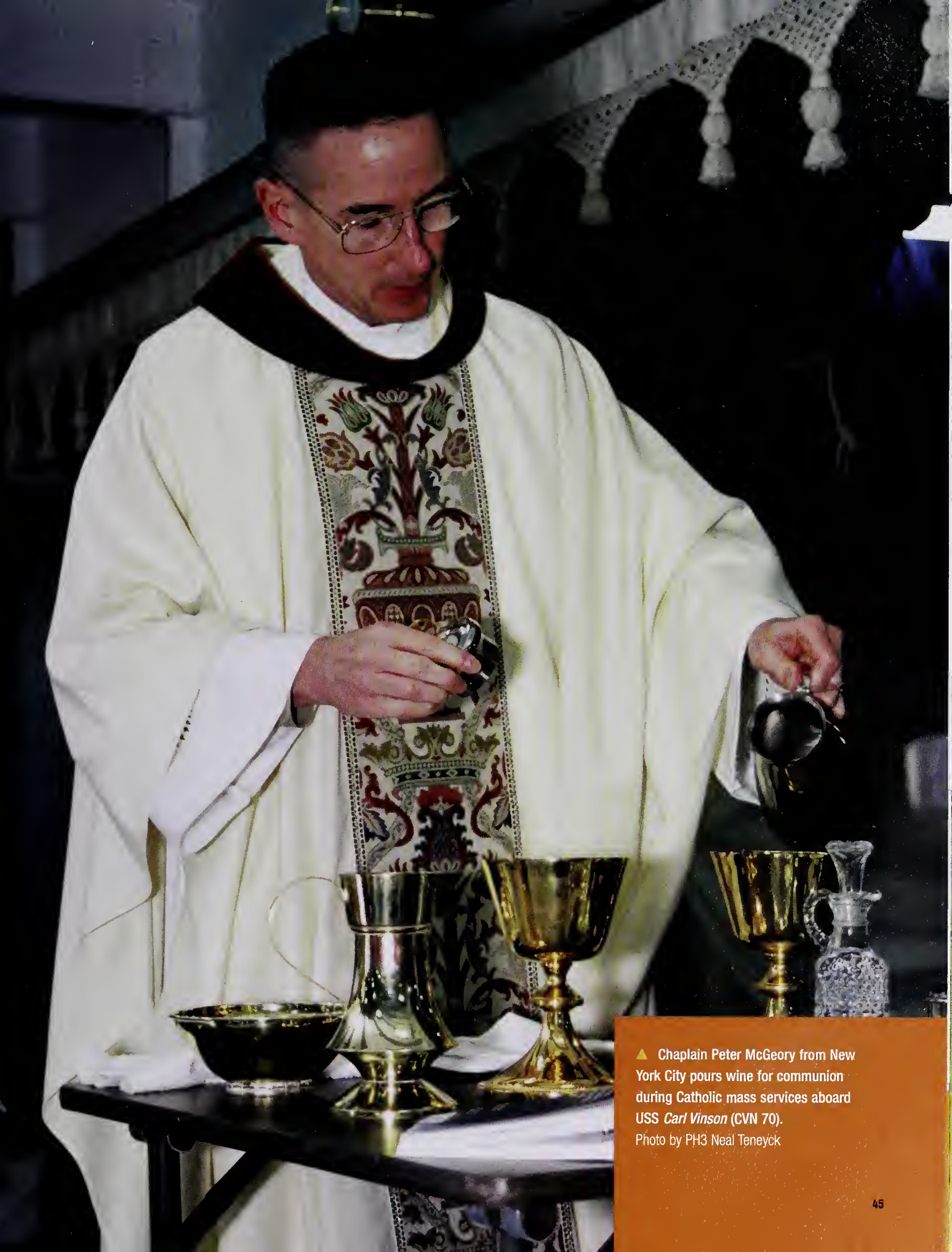
▶ While underway in the Arabian Gulf, ABE3 Nicholas R. Meyer from Wilder, Ky., scans the flight deck of USS *John C. Stennis* (CVN 74) for the appropriate signals after connecting an aircraft to the catapult in preparation for launch.
Photo by PHAN James Farrally II

"The colors must never be struck."

–*Lieutenant William Burrows Jr.*, while dying on board his ship, USS *Enterprise*, during her battle with HMS *Boxer*, September 5, 1813



◀ ET2(SS) Gary Carroll from Fredericksburg, Texas, dusts off the base gym's American flag at Naval Education Training Center Newport, R.I.
Photo by Ron Fontaine



▲ Chaplain Peter McGeory from New York City pours wine for communion during Catholic mass services aboard USS *Carl Vinson* (CVN 70).
Photo by PH3 Neal Teneyck



▲ Search and Rescue (SAR) crew members, AMS2 Kris Melton from Bakersfield, Calif., and AE1 Jon Byrd from St. Inigoes, Md., wait for teammate AT3 Jon Thilges from Glendale, Az., to reach the forest floor during training exercises at Naval Air Station Patuxent River, Md.
Photo by Christine King

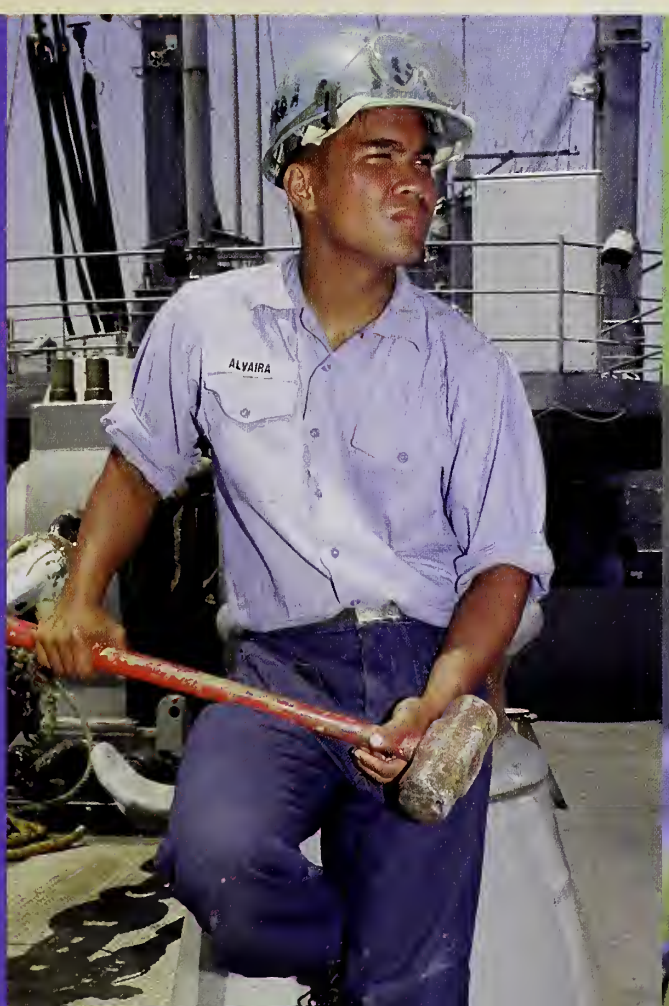


DCC(SW) John F. Garrett takes a break from his daily routine as service craft coordinator for Commander, Naval Base Pearl Harbor. The building was constructed in 1913 and was the location of the intelligence unit that cracked the principal Japanese naval code and helped the United States win the Battle of Midway.
Photo by PH1 William Goodwin

"The United States Navy is the envy of every other navy in the world. They don't want to be like us – they want to be us."

–Admiral Leighton Smith

SN Antonio Alvaira rom Queens, N.Y., waits at his sea and anchor station on board USS *Santa Barbara* AE 28).
Photo by PH2 Jason Carter

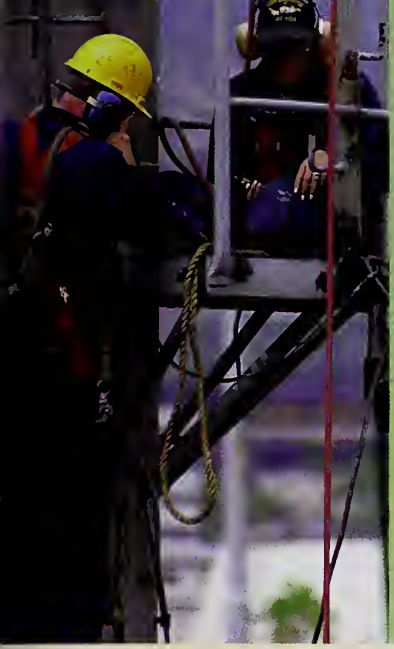


ABH2 Chaka Porter from Montgomery, Ala., watches the flight deck of USS *John C. Stennis* (CVN 74).
Photo by PH1(AW) James Williams





▲ The burial detail at Naval Support Activity Memphis, Tenn. Pictured: (from left) PN3 Karl Faul from Staten Island, N.Y., MA2 Ian Keller from Fort Myers, Fla., HN L. Wilson from Bardstown, Ky., and AE2 Johnathan Hendrix from Birmingham, Ala. Photo by Wayne Smith



BM2 Chris Bender from Dover, Del., cleans the Admiral's Barge for Commander-in-Chief, U.S. Pacific Fleet, at a boathouse in Pearl Harbor.
Photo by JO1(SW/FMF) S.A. Thornbloom

BM2 Thurman Hicks from Cynthia, Ky., gives supplies to SN Jennifer Wayne from Houston, who is performing routine maintenance high above the deck on USS *Frederick's* (LST 1184) port stack.
Photo by PH3(NAC) David C. Mercil



"Thank God I have done my duty."
–*Admiral Horatio Nelson,* while lying mortally wounded on the deck of HMS *Victory* at the Battle of Trafalgar, October 21, 1805

All Hands

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The Honorable John H. Dalton

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ADM Jay L. Johnson

Chief of Information
RADM Thomas Jurkowsky

Commanding Officer, Naval Media Center
CAPT Edward Lundquist

Still Media Department Head
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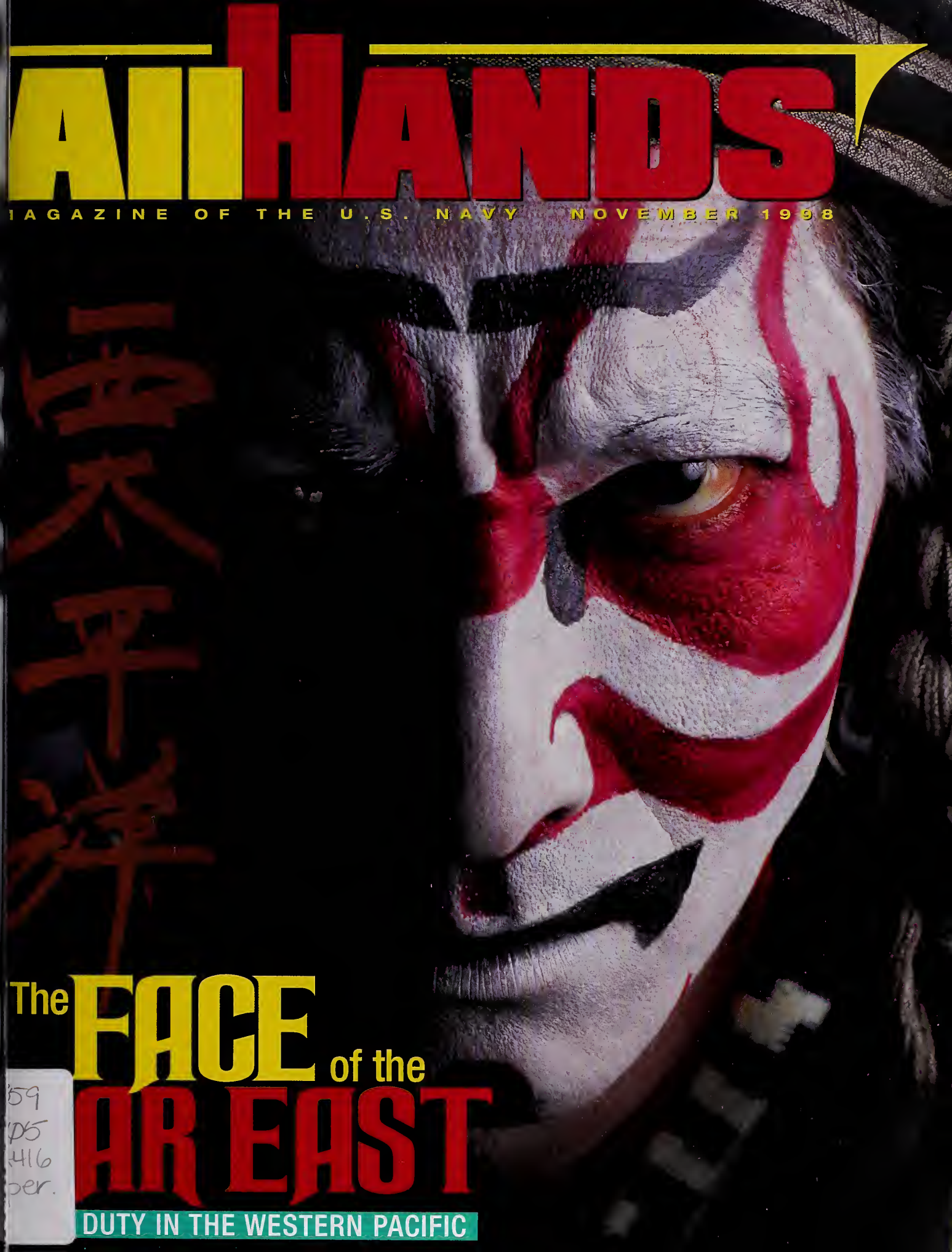
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All Hands

All Hands

MAGAZINE OF THE U.S. NAVY NOVEMBER 1998



The FACE of the FAR EAST

DUTY IN THE WESTERN PACIFIC

59
D5
416
per.

All Hands

Number 979

November



13

U.S. Navy photo

Features

12 **WestPac**
More so than anywhere else in the world, the U.S. Navy's commitment to the Western Pacific exemplifies forward presence. Sailors of the 7th Fleet live and work in one of the most volatile and exotic areas of the world. From Russia to Australia, WestPac Sailors live the adventure... everyday.

So, you're thinking of asking for orders to WestPac. A wise choice. It could be your most exciting, challenging and rewarding tour ever. But before you make a decision one way or the other... let us show you around. There is so much to see!

16 **Yokosuka**
18 **Sasebo**
20 **Okinawa**
22 **Atsugi**
24 **Misawa**
26 **Guam**
28 **Chinhae**
29 **Singapore**



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Photo by CDR Dana Potts

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"Travel is fatal to prejudice, bigotry and narrow-mindedness. Broad, wholesome, charitable views of men and things cannot be acquired by vegetating in one little corner of the Earth all one's lifet[ime]
— Mark Twain

30 **Liberty Call! Liberty Call! All Hands, Liberty Call!**
Start building your own memories by visiting the hundreds of exotic locales spread all across the Western Pacific.

40 **Kamikaze**
Kaoru Hasegawa was 21 years old in 1945 and a lieutenant in the Japanese Imperial Navy when he was ordered to attack USS *Callaghan* (DD 792) and sink her… at all costs.

30

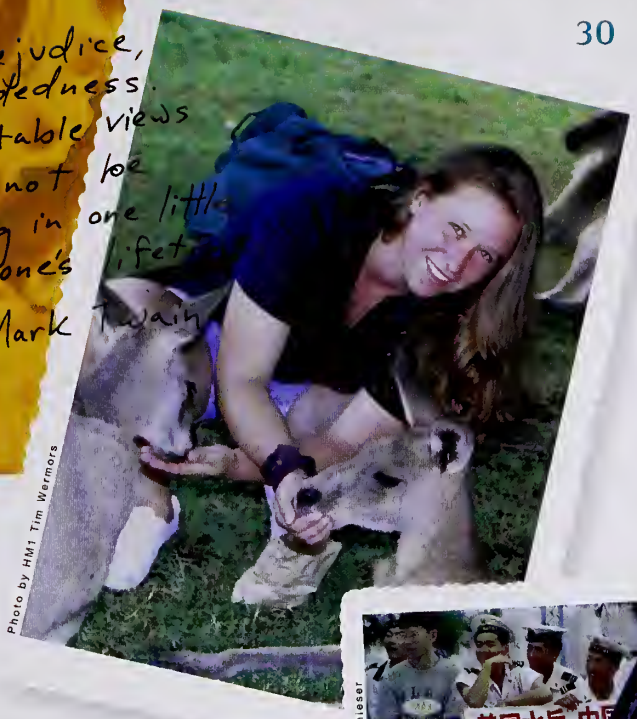


Photo by HM1 Tim Wermors



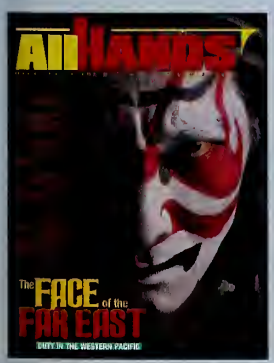
Photo by PH3 Brent Olhieser

40



Photo courtesy of Kaoru Hasegawa

35



On the Cover

For nearly 400 years Kabuki theater has been a popular form of entertainment in Japan. It is a rich blending of realism and formalism, of music, dance, mime and spectacular costuming and makeup.

Photo by JO1 Robert Benson
Modeled by Yusuke Honda
Makeup by Liz Stevens



On the Back Cover

A member of the U.S. Navy's "Dragon Boat" team scans the waterline behind her for any glimpse of the finish line. Okinawa's annual "Dragon Boat" races date back to the 13th century and are believed to bring comfort to the dead and good luck to fisherman.

Photo by JO2 Cynthia Roberts

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Check us out Online at:
www.chinfo.navy.mil/navpalib/allhands/ah-top.html





QM1 Michael Broekhof (left) and QM3 Osiris Castilla plot USS *Hopper's* (DDG 70) course during *RIMPAC '98*, a multinational, maritime exercise involving more than 50 ships, 250 aircraft, 25,000 military personnel and a half dozen foreign countries, including Australia, Canada, Chile, Japan and the Republic of Korea. The exercise featured around-the-clock, at-sea operations and was highlighted by the execution of an amphibious landing on the island of Kauai that tested the skill, stamina and resourcefulness of both Sailors and Marines.
Photo by PH1 Spike Call

PEACE SIGN

USS *Missouri* (BB 63) looms large over a gathering of spectators as she arrives in Pearl Harbor. Commissioned in June 1944, "Mighty Mo" served proudly during the last year of World War II. It was on her deck that a delegation of Japanese officials surrendered to Supreme Commander of the Allied Powers, General Douglas MacArthur, Sept. 2, 1945, ending more than four years of conflict in the Pacific. *Missouri* will be transformed into a floating museum and permanently moored near the *Arizona* Memorial.
Photo by PH1 David Weideman





Letters

Innovative Thinking

As I read the article about the SEALs in the August issue of *All Hands* and then the article about Manta, an idea for another use for Manta crossed my mind. Perhaps Dr. Sirmalis could evaluate this idea to see if it is feasible.

The thought struck me that inasmuch as the SEALs are always looking for innovative ways to utilize different methods to better enhance their chances of accomplishing their missions, Manta might be a great help. Possibly Manta could be modified to stealthily transport SEALs much more closely to their objective before they would have to emerge to the surface to continue on their mission. The necessity to somehow anchor Manta in a given spot might present some problems, however I believe Dr. Sirmalis, if he thinks this idea might work, can overcome this problem.

Another very important item to maximize SEAL survival would be a remote control device to be carried by each SEAL to remotely release the anchor and move Manta to a different location in case the SEALs have to return from their mission at a different spot than where they went in. Of course there would have to be technology for Manta and the mother sub to secretly communicate.

I was in the Army so I have never seen your magazine before, therefore I would certainly appreciate it if you could inform me of any reaction to this idea. Thank you.

Roy Gonzalez
Riverview, Mich.

Bright Lights, Big City

Just a note to clear up some misinformation in the *All Hands* (September 1998) article "The Earle of New Jersey."

- The command's name was changed in 1974 from Naval Ammunition Depot to Naval Weapons Station.
- The waterfront complex is also homeport to USS *Seattle* (AOE 3) and USS *Detroit* (AOE 4).
- The mainside complex also has military billets in Weapon Support Facility, Yorktown Det., Earle; Public Works Center, Norfolk Det., Philadelphia Site, Earle; Supervisor of Shipbuilding Det., Colts Neck; and Mobile Mine Assembly Unit.

I'm not sure why the picture of the pier after a blizzard was used to extol the virtues of being assigned to NWS Earle. Perhaps a better shot would have been of the Manhattan skyline seen from the end of one of those piers or the hundreds of pleasure boats in the Raritan and Sandy Hook Bays on any bright summer day. If a winter scene was necessary, perhaps a picture of Sailors on one of our MWR trips to the several ski slopes within two hours of the base would have been appropriate.



Photo courtesy of NWS Earle

Naval Weapons Station Earle, nestled in rural New Jersey

For more information about NWS Earle, visit our website at www.earle.navy.mil.

CDR Chuck Caudill
XO, NWS Earle

Safety First

In the "Postcard from the Fleet" section of your September issue, you show a picture of an ET1 working on equipment. I am amazed that she would "pose" for this picture with so many glaringly obvious safety violations.

As a former "A" school instructor she should know that "watches, rings and dangly things" are a big no-no when working on electronic equipment. I don't know how close the open unit door is above her head, but when the juice flows through those rings and she involuntarily jerks upward, I see a paragraph in the summary of mishaps with her name on it. Tsk, tsk. Not a very good example for our junior Sailors.

ETC (SW) Leopold
Naval Computer and Telecommunications Station Sicily

Tell us something we don't know.

Send your comments to:
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NAVSTA Anacostia (ATTN: Editor),
2701 S. Capitol St. S.W., Washington, D.C. 20373-5819

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Instructing Excellence



Photo by JO1 Ron Schafer

BM1(SEAL) John G. Kokkinos, CNET Enlisted Instructor of the Year

The 1997 Chief of Naval Education and Training (CNET) Enlisted Instructor of the Year was awarded to Boatswain's Mate 1st Class (SEAL) John G. Kokkinos of Naval Special Warfare Center Det., Little Creek, Va.

The Instructor of the Year Program recognizes the more than 10,000 personnel, officer and enlisted, who personify excellence while serving with dedication and professionalism as Navy instructors. Kokkinos qualified early as a Master Training Specialist at Naval Special Warfare Center Det., Little Creek, Va. The detachment provides a local capability to conduct Special Warfare and advanced SEAL training courses to Naval Special Warfare Command Atlantic's members and other special operations units.

Kokkinos identified a shortfall in the command's ability to consistently qualify their own personnel as Master Training Specialists (MTS). He designed an innovative curriculum for the command's MTS qualification program. His efforts resulted in 13 command personnel becoming qualified in the first 12 months of the new program.

"The lessons learned from past and present instructors and teammates are what drive the success we experience today," Kokkinos said. "We have a responsibility to pass this knowledge on to others, and how we pass this knowledge, the actual act of teaching and instructing, is crucial."

Kokkinos was awarded the Navy and Marine Corps Commendation Medal.

Story courtesy of CNET Public Affairs.

Remembering the Rocketman



Photo courtesy of NASA

Astronaut Alan B. Shepard Jr., who became the first American to travel into space when he piloted the *Freedom 7* on May 5, 1961, died recently at the age of 74.

Shepard was born Nov. 18, 1923, in East Derry, N.H., and was a 1944 graduate of the Naval Academy. He was chosen to be one of the first U.S. astronauts in 1959. He received NASA's Distinguished Flying Cross and Distinguished Service Medal for his heroic first flight. In 1971, he became the first astronaut promoted to the rank of rear admiral.

Countdown to the Millennium



DAYS	HOURS	MINUTES	SECONDS
426	16	29	59

Y2K Solution for ATMs-at-Sea

How computers interpret the year 2000, known as Y2K, places special requirements on many telecommunications, banking and defense computer systems, and the Navy's Automated Teller Machines (ATMs). The ATMs-at-Sea are no exception.

The Navy awarded a contract Aug. 25 to the NCR Government Systems Corp., of Rockville, Md., in support of the Naval Supply Systems Command's (NAVSUP) ATMs-at-Sea Program.

With 24 ATM-equipped ships already Y2K compliant, NAVSUP plans to install a Y2K solution on the remaining 120 ships under this contract. NAVSUP is also developing a contingency plan to ensure uninterrupted ATM service for personnel affected by unanticipated ship movements or other potential Y2K installation delays.

The ATMs-at-Sea system does away with pay lines and reduces workload in shipboard disbursing offices. The system automates pay delivery on board ships, furnishes Sailors with secure storage of their personal funds, and ensures them ready access to these funds 24-hours-a-day, 7-days-a-week.

Story by NAVSUP Public Affairs

Around the Fleet

Profile in Courage

Former Hospital Corpsman 3rd Class Robert R. Ingram was recently awarded our nation's highest honor. During a ceremony at the White House, President Clinton presented Ingram with the Congressional Medal of Honor for his actions of extraordinary heroism in Quang Ngai Province, Republic of South Vietnam, March 28, 1966. Ingram is the 22nd Navy corpsman to receive this prestigious award.

After enlisting in the Navy in 1963, he went to Vietnam with Charlie Company, 1st Battalion, 7th Marines, in July 1965. On that fateful day in 1966, Ingram and his platoon were ambushed by more than 100 North Vietnamese. Through a hail of automatic rifle fire, Ingram, in complete disregard for his own life, crawled across the bloody terrain to administer aid to the wounded Marines. In the hours that followed, while dragging his Marines to safety and seeing to their wounds, Ingram was shot not once or twice, but four times.



Photo by JO1 S. Todd Stevens

Medal of Honor recipient, and former HM3, Robert Ingram

President Clinton praised Ingram for his selflessness and devotion to duty. "He continued administering aid to the wounded and dying Marines even though he himself was severely wounded."

When Ingram was finally pulled from the line of fire he was almost unrecognizable through all the blood and dirt. Though bleeding badly and in need of serious medical attention, Ingram refused to be evacuated, insisting that others go first. While he waited, Ingram's vital signs dropped so low at one point that he was tagged "killed in action" and placed with the dead.

But Robert Ingram did not die that day in Vietnam. Eleven members of Charlie Company did and 53 more were wounded. Those who survived are alive today because of "the extraordinary selflessness and bravery of Robert Ingram," said the President.

"His reward comes appropriately as we celebrate the 100th anniversary of the Navy Hospital Corps," the President continued. "Through all our conflicts, they have been there on ships at sea, on the front lines, performing foxhole surgery, saving thousands of lives while risking and sometimes sacrificing their own. I salute their courageous service to our nation."

Story by JO2 Brigette Barnes, Navy News Service

First Recruit

Navy Recruiting District Omaha, Neb., recently enlisted its first recruit in the new Associate Degree Completion Program (ADCP). Jared L. Draeger of Norfolk, Neb., enlisted for the nuclear field program.

While in college under ADCP, qualified enlistees with one year of college receive active-duty E-2 pay, allowances and benefits and can choose the Navy College Fund, a loan repayment program or up to a $12,000 enlistment bonus.

Nineteen-year-old Draeger wasn't very interested in enlisting in the Navy until he made contact with Engineman 2nd Class Mark Wurdinger of Navy Recruiting Station Norfolk, Neb., who told him about the various job opportunities the Navy has to offer.

"He was a tough sell, until ADCP came along," said Wurdinger. "Our biggest obstacle was that Jared was dead-set on finishing college. With this program, he gets to do that, and we get a new Sailor

Postcard From the Fleet



NAME: YN3 Terry W. Young

COMMAND: Fleet Surveillance Support Command Chesapeake, Va.

HOMETOWN: Charlestown, Ind.

HOBBIES: Sports

FAVORITE DUTY STATION: Fleet Surveillance Support Command Chesapeake, Va.

FAVORITE QUOTE: "I have too often looked death in the face to be afraid of him now." – *Sailing Master John C. Aylwin, USS* Constitution, *1812*

KEYS TO SUCCESS: "Take the initiative and do something when you see it needs to be done."

GOALS: To earn a bachelor's degree while on active duty.



Photos by JO2 Kaye Trammell

with a lot of potential."

"ADCP was the deciding factor for me," Draeger said.

Draeger is now attending a community college in his hometown. Once he earns his associate degree, Draeger will report to the Recruit Training Command, Great Lakes, Ill., as an E-3.

Upon successful completion of recruit training, he will attend the Navy's Nuclear Field Training School in Charleston, S.C.

Story by JO2 Bob Everdeen, Navy Recruiting District Omaha Public Affairs.

CBD Protection

Secretary of Defense William S. Cohen recently announced that Phase I of the Total Force Anthrax Vaccine Immunization Program would commence with service members deploying to Southwest Asia and Korea. Immunizations for those active-duty personnel and Selected Reserves already assigned and located in Korea began in early September.

Eventually, all 2.4 million military service members in the active and Reserve components will receive the FDA-licensed Anthrax vaccine. The phased vaccination program will take six to seven years to complete and is part of the Force Health Protection Plan.

More information on DOD's Anthrax vaccination program is available on the World Wide Web at: www.defenselink.mil/other_info/protection.html.

Story by DOD Public Affairs.

By Master Chief Petty Officer of the Navy MMCM(SS/SW/AW) Jim Herdt

Speaking with Sailors



Photo by JO1 Robert Benson

You've got questions. I've got answers. Below is a sampling of the types of questions I answer on a daily basis as I visit with Sailors and their families both at sea and at shore installations worldwide.

Q: Other than the SK/AK merger, are there any other rating mergers upcoming?

A: There are currently no new official rating mergers. There have been rumors that the DC/HT and AK/SK ratings may merge. Although surveys are being conducted, further mergers have not been approved at this time.

Q: Why do E-6 (and below) collar devices cost $4 while chief petty officer collar devices cost $14?

A: E-6 (and below) collar devices are a pewter mold, and therefore cost less. E-7, E-8 and E-9 collar devices are made of a metallic mold and assembly is required. The metals are also polished.

Q: How can we get the academic skills courses on board?

A: If you have the PACE program on board, you already have academic skills courses available. If you do not have PACE, then your command is behind the power curve. Commands without PACE need to request the program by contacting Jim Lozier at the office of the Chief of Naval Education and Training, or CNET, at DSN 822-1779 or (850) 452-1779. All necessary information and course material will be forwarded to the command.

Q: Do single parents need to move out of housing if they send their child to stay with a relative for the six months they are on deployment?

A: Typically, the Navy permits family members to be away from their housing unit for no longer than 90 days. However, the local housing authority may make an exception if a member is being deployed and chooses to send their family members to stay with a relative or guardian. In this situation, the member would not draw BAH because quarters are being provided, even though they are not in use. The Sailor needs to inform the housing office of their upcoming deployment and make arrangements to take care of their obligations, such as mowing the lawn.

In a similar situation, Navy housing policy (OPNAVINST 11101.13J, Enclosure 6, Page 2) states that the housing authority may permit a live-in aide, if they are given guardian status.

Q: Are there any plans to allow E-5s to become Navy counselors (NCs)?

A: Members of the Career Recruiter Force (CRF) with fleet NCs may be E-5s, but fleet NCs must be E-6s. There is a proposal to merge the two. Merger studies should be complete in FY00.

***Speaking with Sailors* is a new monthly column initiated by the Master Chief Petty Officer of the Navy as a way of reaching out to the men and women of the fleet, whether they are stationed just down the road or halfway around the world.**

Around the Fleet

San Diego Homes Get a Facelift

Volunteers from 17 San Diego-based Navy and Marine Corps commands joined more than 2,000 community volunteers at "FaceLift 100" hosted by San Diego Neighborhood Housing Services, Inc., (NHS) to improve the City Heights community.

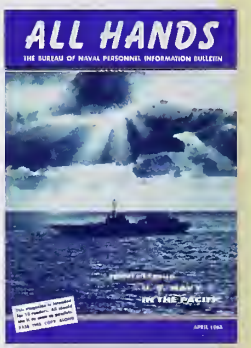
Working shoulder-to-shoulder with community representatives, these Sailors and Marines painted the exterior of homes, provided limited landscaping and removed 100 tons of debris from the yards and streets of four different neighborhoods in City Heights.

"We have been overwhelmed by the Navy's response to the 'FaceLift' program," said Steve Mitchell, an NHS board member and retired Navy chief petty officer. "Such an outpouring of volunteers is a testament to the Navy's commitment to the San Diego community."

Story by San Diego Neighborhood Housing Service.

TIME CAPSULE

In April 1963, All Hands dedicated an entire issue to duty with the Pacific Fleet. Here is an excerpt from one of the stories inside that issue:



... When you are assigned to duty with CINCPACFLT – and chances are good that you will serve in this command sometime during your naval career – you'll discover that your tour can provide the most varied kinds of assignments and challenges of any command in the sea service.

In the Pacific Fleet you may get tropical duty or arctic duty. You may serve in a nuclear submarine or with the high-flying Barrier Force, in a wooden minesweeper or as a member of a fast carrier attack group. You may be located at any one of dozens of bases, on a palm-fringed isle or near a huge metropolis, and you will hear spoken scores of strange and colorful languages.

... Ask a 7th Fleet Sailor, and he'll tell you that his ship helps extend America's sea power wherever there is water, and to the lands touching that water in the Pacific. The fleet's striking power may be carried far beyond the coastlines, if necessary, by far-ranging carrier aircraft and amphibious forces. ...

Geese Police



Photo by Michael O'Leary

Lynn Kalnoski of the Kalcade Geese Police and one of her dogs chase a problem goose from the grounds of Naval Station Everette.

Naval Station Everette has gone to the dogs – for local Canada geese, at least. A new program to control the geese without injuring or killing them started this summer, using herding dogs to force the birds off station.

According to Lynn Kalnoski of the Kalcade Geese Police, dogs will be used throughout the fall months to chase the geese from the station. Louie, a border collie, and Troy, an Australian shepherd, are Kalnoski's dogs. The two are trained herders, while another border collie named Rhett is now in training.

"The dogs are actually herding the geese," explained Kalnoski. "The birds see the dogs as a threat to their safety. The geese think they're predators."

The overall number of birds on station has dropped tremendously because of control measures such as these. In past years, thousands of Arctic and Caspian terns and gulls would nest on station. Everette has almost completely eliminated these nestings. And the Canada geese are not far behind.

Story by JO1 Jason Chudy, Naval Station Everett Public Affairs

Ace

With one swing, Yeoman 1st Class (AW) Vincent Hain, from Jacksonville Fla., found himself behind the wheel of a new car. Hain stroked a hole-in-one on the par three, 189-yard 9th hole at the Coronado Municipal Golf Course during San Diego Fleet Week's Golf Tournament to claim his prize.



Photo by JO3 Chris Halsey

YN1(AW) Vincent Hain leans on the new car he won by hitting a hole-in-one during San Diego Fleet Week.

"I've played golf for 30 years and before this year I had never even seen a hole-in-one," Hain said.

Using a seven iron, Hain landed his ball on the green about nine feet from the hole where it then rolled to the lip of the cup, teetering on the edge.

"I could still see the ball on the green, so I had resigned myself to another 'close but no

cigar' scenario," said Hain. "But just as I had put my club in the bag, a heavy gust of wind literally plopped the ball in the hole, just like in the movie *Caddyshack*."

Story by JO1(SW) Douglas H. Stutz, Naval Base San Diego Public Affairs.

Underway on Nuclear Power

ADM Hyman G. Rickover had a vision – to design and build a Navy of warships not dependent on refueling. When he started the Nuclear Power Branch in August 1948, it took him less than six years to make that vision a reality. Rickover and his team of Navy, government and contract engineers designed and built a nuclear reactor that could be provide an almost inexhaustible energy supply for Navy ships at sea. When USS *Nautilus* radioed its historic message, "Underway on nuclear power," a new age of warfare was born.

The Navy recently celebrated the 50th anniversary of Rickover's vision at a ceremony held at the Navy Memorial in Washington, D.C. Today, the program is responsible for more than 116 nuclear reactors aboard 95 submarines and aircraft carriers.

"This organization went a long way in winning the Cold War," said ADM Frank Bowman, Director of Naval Nuclear Propulsion. "I think that that's an important legacy for people to recognize – that high standards of excellence lead to victory."

Secretary of the Navy John H. Dalton added, "It is a legacy of safety, of professionalism, of design, of planning, of vision, and of commitment."

Information provided by NAVSEA Public Affairs



Photo by PHCS(SW) Mahon

The *Truman* Show

The world's newest and most advanced aircraft carrier USS *Harry S. Truman* (CVN 75) was commissioned this past summer at Norfolk Naval Base. The carrier is named in honor of Harry S. Truman, 33rd President of the United States. *Truman* is the eighth carrier of the Nimitz-class. She will be homeported in Norfolk.

For more information visit www.navy.mil/homepages/cvn75



Photo by JO1 Rodney Furry

Coming Home

The ship grows slowly out of the horizon and the minutes drag like months as a separated family waits to be whole again. A child clings to the folds of his mother's skirt while her eyes scan the decks, looking for that one familiar face among the sea of blue uniforms. And then she sees him, yelling and waving wildly. Tears begin to come as he grabs his seabag and runs into her arms – disappearing into an embrace so tight that a team of wild horses couldn't tear them apart.

This emotional moment known by every Sailor who has ever gone to sea was captured by sculptor Stanley Bleifeld in his arresting work titled "The Homecoming." Now, through the efforts of the Navy League and Navy Memorial Foundation, the image – and the moment – has been captured forever with a life-size bronze statue on the waterfront of San Diego Bay. The dedication of the seven-foot statue coincided with San Diego Fleet Week.

"I can't believe how well this captures the spirit of the moment," said SH3 James C. Hendricks, assigned to Naval Amphibious Base Coronado, Calif. "As a veteran of three Western Pacific deployments, I know how the Sailor in the statue feels. When you finally get your arms around them, there's a lot of tears and makeup on your uniform, but nobody cares. You just don't want to let them go."



"We're out here doing what we are trained to do more often than anywhere else in the world."

– ETC Phil Molter, USS Mobile Bay (CG 53)

WestPac

Dawn approaches. The horizon begins to glow as the Sun's golden rays slowly climb over eastern hills and turn the sky into fire. The sea is clear and calm as fishing boats make their lazy way home. Sailors wait anxiously on the deck of USS *Blue Ridge* (LCC 19) for the brightly-colored liberty boats that will ferry them to the glistening, white sands of Pattaya Beach, Thailand. **The day has begun. The adventure is here. The Western Pacific is calling.**



U.S. Navy photo

"The intensity level is higher here than anywhere else in the world. You can never lose your edge because every day is a new challenge. If anything ever happens, we'll be the first to be called."

– EM3 Jubal Castilla, USS Thach (FFG 43)



Photo by PH2(AW) Gloria J. Barry

A crew from Beach Master Unit 1 provides traffic control to effectively direct arriving craft to the landing zone during a recent exercise in Thailand. The U.S. 7th Fleet conducts exercises every year with many of the nations in the Western Pacific.



Photo by PH2(SW) Jett Dempsey

People's Liberation Army (Navy) Sailors march past USS *Blue Ridge* (LCC 19) upon the ship's arrival in Quindao, China.

That area of the world known as the Western Pacific has no real boundaries. That is to say, there are no specific landmasses which give it a definite shape. The term WestPac loosely applies to an area which runs along the international dateline west of Hawaii to the border of the Indian Ocean, and from the Kuril Islands south to Antarctica. It remains one of the most diverse areas of the world and is home to the U.S. 7th Fleet.

7th Fleet – Forward Presence

More so than anywhere else in the world, the U.S. Navy's commitment to the Western Pacific exemplifies forward presence. The explosive economic potential of the region makes it vital to American trade. Its volatility necessitates vigilance. 7th Fleet is forward deployed

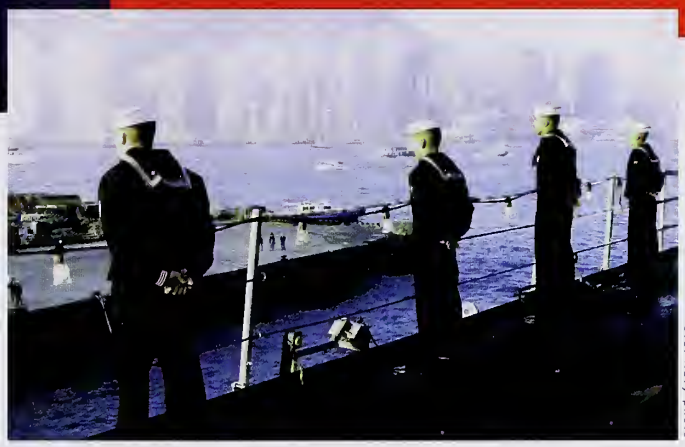


Russian soldiers await the arrival of USS *Blue Ridge* (LCC 19), flagship for Commander 7th Fleet, during the ship's port visit to Vladivostok, Russia.



USS *Belleau Wood* (LHA 3) is part of the forward-deployed surface fleet homeported in Japan.

Photo by PH1 Michael Shirley



U.S. Navy photo

Sailors on board USS *Blue Ridge* (LCC 19) man the rails as the ship pulls into port on the Kowloon side of Hong Kong early in the morning. USS *Blue Ridge* has made Hong Kong one of its most frequent stops when leaving home port in Yokosuka, Japan.

to prevent aggression and to respond, at a moment's notice, when unchecked aggression translates into hostile action.

The 7th Fleet patrols the waters of the Western Pacific and Indian Oceans, an area totaling more than 52 million square miles. Typically, the fleet has 50 to 60 ships, including carrier battle groups, amphibious ready groups and logistic support ships, with the core of these forces based in Japan and Guam.

In addition to the fleet's flagship, USS *Blue Ridge* (LCC 19), USS *Kitty Hawk* (CV 63) and her battle group operate from Fleet Activities Yokosuka. The *Kitty Hawk's* air wing, Carrier Air Wing 5, resides at Naval Air Facility Atsugi. From Sasebo, USS *Belleau Wood's* (LHA 3) amphibious ready group, which includes USS *Dubuque* (LPD 8), USS *Germantown* (LSD 42) and USS *Fort McHenry* (LSD 43), stand ready to transport Marines from Okinawa to exercises and operations anywhere in theater. Sasebo is also the forward-deployed home of USS *Guardian* (MCM 5) and USS *Patriot* (MCM 7).

From Guam, USS *Frank Cable* (AS 40) provides mobile repair services to 7th Fleet ships and Military Sealift Command maintains logistics support ships in Guam's Apra Harbor.

Vital shore installations can be found in Japan, the Republic of Korea, Singapore and Guam. In addition to providing ship repair and supply support to 7th Fleet ships and aircraft, these facilities work hand-in-hand with their local military counterparts and communities.

Sailors live, work and play alongside the local population, take part in civic action efforts to improve the lives of the people living in surrounding areas, and help define America in the Far East.

Yokosuka



According to Buddhist belief, during Obon, the Japanese festival of the dead, the spirits of ancestors return to Earth. Lanterns are lit, which relatives float out to sea, to greet and say good-bye to the visiting spirits.

A little girl dances in the annual Cherry Blossom Festival held at Yokosuka Naval Base, Japan.

Photo by PH1 Awe Ma

Sumo wrestlers in Yokosuka, Japan, engage in fierce fighting during tournament competition. The fighting art of "Sumo" dates back 2,000 years and is considered to be the national sport of the country.





Photo by PH3 Greg Mitchell

Yokosuka is ideally located to give Sailors the opportunity to study Japan's past or catch a glimpse of her future. Sailors can travel to the nearby port city of Shimoda for the Black Ship Festival, which commemorates Commodore Matthew C. Perry's landing in 1853 or board a train for the 55-mile trip to Tokyo and the whirls, blinks, whiz bangs and blips of the latest-and-greatest gizmos to hit the Akihabara electronics district.

Sailors may be hesitant to be stationed where English is a secondary language. Step outside the main gate at Yokosuka Naval Base, and everything from street signs and billboards to store and restaurant displays are written in those distinctive and elaboratly decorative Japanese characters called *kanji*.

But after a few months and a few language lessons, most Sailors grow accustomed to the cultural differences and begin exploring – and there is so much to discover!

At the *Yokosuka-chuo* train station, which is just a short walk from the main gate, Sailors can buy a ticket north to Tokyo or south to the beach at the tip of the Miura penninsula.

For Sailors who like having a wide variety of recreational options at their fingertips, Yokosuka is the place. At the 300,000-square-foot fleet recreation center located within footsteps of the waterfront, Sailors have access to a huge gym, several racquetball courts, a state-of-the-art weight room, outdoor gear issue and even an Internet café.

Selecting orders to Yokosuka, Japan, may be the best move you ever make. Few duty stations offer such a diverse selection of recreational opportunities. So get out there, learn a little Japanese and make the most of your tour in the "Land of the Rising Sun."

Information provided by JO1 Lance R. Lindley, Commander, Naval Forces Japan, Public Affairs.

Fast Facts

Location: Southeast of Kanagawa Prefecture and in the middle of the Miura Peninsula; faces Tokyo Bay on the east and Sagami Bay on the west. The city is within 65 miles of Tokyo and 30 miles from Yokohama. Yokosuka is the largest, most strategically-important overseas U.S. naval installation in the world.

Major commands: Commander, 7th Fleet; Commander, Naval Forces Japan; Commander, Destroyer Squadron 15; Commander, Submarine Group 7; USS *Kitty Hawk* (CV 63); USS *Blue Ridge* (LCC 19); Commander, Fleet Activities Yokosuka; Afloat Training Group Western Pacific; Navy Center for Tactical Systems Interoperability Det. 5; Naval Computer Telecommunications Station Far East; Ship Repair Facility; Naval Pacific Meteorological Oceanographic Facility Yokosuka

Population: 23,000 military and civilian personnel

Facilities: Navy Exchange; NFCU; Nations Bank; USAA Federal Credit Union; USN hospital/dental; Child care; DOD elementary and high schools; undergraduate and graduate opportunities

Housing: 2,469 homes and apartments; 18- to 30-month waiting list; E-1 to E-3 and GS-11 and below are not eligible for government quarters

Internet: PWC Yokosuka (www.pwcyoko.navy.mil); Commander, Naval Forces Japan (www.cnfj.navy.mil); Fleet Activities, Yokosuka (http://metoc.npmof.navy.mil/yoko/cfay.htm)



The Peace Statue at the center of Nagasaki Peace Park, was erected in 1955 in memory of those who died from the atomic bombs dropped on Hiroshima and Nagasaki during World War II. The 90-foot bronze statue was dedicated as an appeal for lasting world peace.

Sasebo

Are you looking for adventure and excitement? Simply say the magic words, "I want orders to Sasebo, Japan."

Now, I know what you're thinking. "Wait a minute, isn't that halfway around the world? They don't speak English there, do they? I don't even like raw fish." Relax. Sasebo *is* halfway around the world and English *isn't* the official language, but don't worry, they have hamburgers too.

If you're willing to accept the challenges and opportunities of an overseas assignment, we'd like to welcome you to Fleet Activities, Sasebo – a base with a reputation as the "best-kept secret in the Pacific." We've got it all – a great location, a thriving recreation program, a commitment to Sailors' quality of life, professional opportunities, and an unrivaled relationship with the local Japanese community, with numerous events throughout the year where military members and Japanese citizens celebrate their special friendship. The largest of these events, the Saikai-American Festival, attracts an estimated 100,000 people to *Nimitz* Park for two days of band concerts, sporting events, cultural exchanges and theatrical performances.

Much of Sasebo's shopping and restaurant areas are within easy walking distance of the base. For those who want to explore the island, trains and buses make it easy and affordable.

The surrounding mountains, harbor and countryside are breathtaking, and they offer great recreational opportunities such as grass skiing, hiking and camping. Or you can head for the coast for waterskiing, kayaking, sailing, swimming, surfing or scuba-diving.

Our location, on Kyushi Island, the southernmost main island of Japan, also means you'll have quick and easy access to the entertainment and shopping attractions of the island's largest city, Fukuoka City.

Fukuoka City offers entertainment such as Japanese baseball, concerts, shopping and a thriving nightlife. About 90 minutes south of the base is Nagasaki, where you can visit the Atomic Bomb Museum.

The MWR department at Sasebo has proven its commitment to its Sailors, having won the Bureau of Naval Personnel Holiday Programming Award four of the past five years. But, it's not just during the holidays that MWR Sasebo shines. Some highlights of their services include: the newest and most popular dance club in the area called Galaxies Club; fantastic tour packages to exotic destinations; an active single



Photo by PH1/AW Essex D. Moore, III

Sasebo's Chuo Park incorporates several small playgrounds into the layout of a typical neighborhood city block. This "neighborhood" allows children to practice their driving skills, obey pedestrian crossing signs, and enjoy themselves in the playground.



A bustling city street in downtown Sasebo City

Sailors program; plus numerous restaurants, athletic programs and recreational facilities.

Fleet Activities Sasebo provides facilities for six forward-deployed ships and for the visiting ships of the U.S. 7th Fleet. USS *Belleau Wood* (LHA 3), USS *Dubuque* (LPD 8), USS *Fort McHenry* (LSD 43) and USS *Germantown* (LSD 42) are stationed in Sasebo as the Navy's only permanently forward-deployed amphibious ready group, Amphibious Squadron 11. The only minesweepers in Japan, USS *Patriot* (MCM 7) and USS *Guardian* (MCM 5), are also located in Sasebo.

There are two housing areas in Sasebo, but the number of units available is much less than the military population, which means that most accompanied personnel arriving in Sasebo will live in a Japanese house or apartment until housing is available. Living in a Japanese home and community is an adjustment, but one that is easily done with the help of the many organizations and offices on base.

Because we aren't the biggest base in the region, you'll get more one-on-one mentoring and more attention from service providers, such as the expanding Navy Campus program.

In Sasebo, you can see and experience Japanese culture first hand. Sasebo City and its residents are gracious hosts and they go out of their way to welcome and introduce you to their culture.

So remember, just six little words can change your life, "I want orders to Sasebo, Japan." Go ahead, pick up the phone and give your detailer a call – before someone else beats you to it.

Information provided by Susan Baldwin, Public Affairs Officer, Fleet Activities Sasebo.

Fast Facts

Location: **Located on Sasebo Bay, on the northwest corner of the island of Kyushu; 30 miles northwest of Nagasaki.**

Major commands: **COMPHIBRON 11; USS *Belleau Wood* (LHA 3); Commander, U.S. Fleet Activities Sasebo; Fleet Industrial Supply Center; U.S. Naval Pacific Meteorology & Oceanography Det.**

Population: **5,500 military, DOD civilians and their families**

Facilities: **Bowling alley; restaurants, gas station; all hands club; gyms; medical/dental clinics; commissary; exchange; chapel; post office; banks; DOD school**

Housing: **High rise apartments, duplexes and town houses; waiting list 12 to 24 months; government housing not available for E-3 and below or GS-6 and below**

Internet: **U.S. Fleet Activities Sasebo (www.cfas.navy.mil)**



Photo courtesy of Japan National Tourist Office

The "onsen," or open-air bath, is a popular diversion for the Japanese.



A "Dragon Boat" prepares to take part in Okinawa's annual raci
event. The races date back to the 13th century and are believ
to bring comfort to the dead and good luck to fisherm

Okinawa

Pack away your parkas and mothball the peacoats – you won't need them in Okinawa. A sub-tropical climate and balmy tradewinds keep this jewel of Navy duty stations warm, even when the rest of Japan is shivering.

Okinawa is a true island paradise. Perfect for those who enjoy year-round warm weather, tropical breezes, sunny beaches and all manner of water sports, Okinawa has some of the best coral reef diving and golfing in the world.

Eight hundred and fifty miles south of Tokyo and only 350 miles east of Taipei, Okinawa is the largest island in the Ryukyu chain – more than a score of nearly untouched islands with pristine beaches and coral reefs abundant with life. Often referred to as the "Keystone of the Pacific" due to its strategic location to Western Pacific deployment routes and significant Far Eastern locales, the island itself is a little more than 60 miles long and varies from three to 18 miles in width.

Okinawa is an immensely popular 7th Fleet liberty location and supports a surprisingly large naval presence. More than 3,000 active-duty Navy personnel live and work here. When you add family members and civilian employees, the total Navy population on Okinawa is more than 6,000, with some two dozen different commands and detachments located throughout the

southern half of the island.

The Okinawan people and their culture are unique. Although it belongs to Japan today, Okinawa – or the Kingdom of the Ryukus, as it was known long ago – has origins that are Chinese, Malaysian and Indonesian, with other Pacific regional influences. A peaceful, family-oriented people, the Okinawans have their own language, religions and traditions.

Sailors and their families stationed here enjoy participating in many Japanese and Okinawan festivals and cultural events throughout the year – the giant tug-o-war, bull fights, Eisa dance festivals, international parades, and Kadena Air Base's own AmericaFest – to name only a few.

The New Year in Japan brings with it countless social activities and celebrations. One of the most popular is the "Dragon Boat" races held in early May when teams of men or women row elaborately decorated "Dragon Boats" in competition against other military and Japanese teams.



Photo courtesy of Japan National Tourist Office

Okinawa's Shuri-no-mon Gate reflects the ornate design of the island's many castles, shrines and temples.



The history of the race dates back to the early 13th century in China, when a *ruari* named Kutsugen threw himself into the river to prove his loyalty to the Emperor. Later, when the King of Ryukyu heard the story, he was so impressed that he decided to hold an annual race on Okinawa. It is believed that the races bring comfort to the dead and good luck to local fishermen.

Those who come to the race to row or to cheer for their teams find a fun-filled day of festival activities, with booths serving a variety of cultural foods such as fried rice, tempura or yakisoba. Other booths feature games and rides for children, much like a county fair but with a definite Okinawan flair.

Life in Okinawa consists of more than just experiencing a new culture. Sometimes it is just as fun to share American culture and traditions with others. That is exactly what the members of the First Class Petty Officers' Association on Okinawa do when they visit a nearby school. Whether by teaching children how to carve a pumpkin and clean out the gooey insides for Halloween, by explaining how to prepare a traditional Thanksgiving dinner, or by painting Easter eggs for the children to find in the springtime, Sailors and their families try to bring a bit of America to Okinawa.

AmericaFest is another opportunity for military members to share American culture. This year AmericaFest featured music groups "Allure" and "Great White" and a spectacular fireworks display.

Year round you will find a wealth of activity and beauty to enjoy on Okinawa, with the long summer's kaleidoscope of brilliant flowers, dazzling white beaches, stunning coral reefs and beautiful sunsets. Whether you are engaging in a rich exchange of culture, enjoying the many outdoor activities, or simply watching a brilliant sun sink into the China Sea, you won't soon forget the time you spend in Okinawa.

Information provided by Fleet Activities Okinawa Public Affairs.

Fast Facts

Location: Made up of 72 islands, Okinawa is the main island in the Ryuku Archipelago.

Major commands: Naval Hospital, Camp Lester; COMPHIBGRU One/CTF 76; Personnel Support Det.; NAVCOMM Det.; Military Sealift Command; Naval Security Group Activity, Hanza; NCIS; Naval Air Pacific Repair Activity Det.; Fleet Imaging; Naval Mobile Construction Battalion 74

Population: 30,000 military; 2,400 DOD civilians; 25,000 family members

Facilities: DOD schools; medical; dental

Housing: 8,129 housing units

Internet: Commander Fleet Activity Okinawa (www.cfao.navy.mil); Marine Bases Japan (www.okr.usmc.mil); map of the island (www.sunlink.net/~maikey/map.htm)



Photo courtesy of Japan National Tourist Office

Okinawan dancer in traditional dress

Mt. Fuji, on the island of Honshu, is the highest mountain in Japan, rising 12,388 feet – often into the clouds. The Japanese have long considered it a sacred mountain and more than 50,000 pilgrims climb to its summit every year.

The Diabatsu, or Great Buddha, in Kamakura, Japan, is a popular tourist attraction. The statue's restful expression reflects the Buddhist ideal of detachment from all desires and worldly things.



Atsugi

Imagine working in a small-town just a stone's throw from the world's largest city. Picture living on the ocean, near ancient temples and under one of the largest mountains in the world. Now imagine that there is an airport just down the road with flights to destinations throughout Asia – flights you could take for free. While you're daydreaming, why not toss in an 18-hole golf course right in your backyard.

Is the picture becoming clearer? Then welcome to Naval Air Facility (NAF) Atsugi, Japan. NAF Atsugi is situated in the heart of the Kanto Plain, with easy access to metropolitan Tokyo, cosmopolitan Yokohama, historic Kamakura and the awe-inspiring Mt. Fuji. It's conveniently located within an hour of numerous other U.S. military bases, including Camp Fuji, with its 18-hole golf course, and Yokota Air Base, a hub for military flights throughout the Western Pacific.

NAF Atsugi is not a resort, but it sure seems like one. In addition to the golfing, traveling and sightseeing, NAF Atsugi's MWR program hosts many events throughout the year that make it easy to enjoy the exciting opportunities of being stationed in Japan. In addition to ski trips, Mt. Fuji climbs and trips to Tokyo Disneyland, there are many events held in conjunction with the local community as well. These events include marathons, concerts, cherry blossom festivals, golf tournaments, Japanese "bon odori" dance festivals and Children's Day festivals.

And our Sailors and pilots work as hard as they play. We're the home of Carrier Air Wing-5 (CVW-5), the Navy's only permanently forward-deployed air wing. As such, CVW-5 is able to build a uniquely strong partnership with USS *Kitty Hawk* (CV 63), the carrier on which they deploy. CVW-5's planes and pilots spend a lot of their time in the air, doing what they do best, and our maintenance and support crews stay on *Kitty Hawk* or on the practice strip at historic Iwo Jima.

Atsugi's biggest event of the year is the *Wings* air show, which brings more than half a million Japanese visitors to the base for a weekend of planes, static displays and flying. NAF Atsugi is the only U.S. naval air facility outside of CONUS that holds demonstration flights, and the show's popularity is a testimony to how exciting and intriguing our local hosts find our work, our base and our way of life.

Information provided by JO1 Lance Lindley, Commander, Naval Forces Japan Public Affairs.



Photo by PH2 Anthony Pugliani

Tokyo Disneyland is a modern playground for children and adults alike. It offers a great getaway day for any family stationed in Japan.



Photo courtesy of Japan National Tourist Office

Fast Facts

Location: In Ayase city, 10 miles due west of Yokohama and 23 miles southwest of Tokyo.

Major commands: COMFAIRWESPAC; U.S. Naval Air Facility Atsugi; FASOTRAGRUPAC; Naval Pacific Meteorology & Oceanography Det.; Naval Air Pacific Repair Activity; Carrier Air Wing 5

Population: U.S. Navy - 3,406; DOD - 1,383; Family members - 1,751

Facilities: DOD schools; commissary; exchange; MWR gym, golf, bowling

Housing: On-base quarters available

Internet: Naval Air Facility Atsugi (www.atsugi.navy.mil)



Aircraft from every squadron attached to the only permanently forward-deployed airwing, CVW-5, fly in formation in front of Mt. Fuji.

Misawa



On the last day of the Nebuta Festival, floats that were pulled through the streets during the parade are floated onto the water for judging. A display of fireworks (hanabi) rounds out the evening.

Photo Illustration by PH2(AW) James J. Weber

When was the last time you were stationed at a base that boasted its own ski lodge, marina, beach, golf course, skeet range and 24-hour fitness center? Misawa has all of that and more.

Duty at Misawa in northern Japan is far different from anywhere you may have been stationed before. In addition to the Navy, Misawa Air Base also hosts U.S. Army, Marine Corps and Air Force units in conjunction with Japanese Air Self-Defense Forces. The camaraderie and interaction among all the services is unparalleled.

Opportunities abound for Sailors to join a team of 1,200 plus personnel,



Nebuta Festival in Aomori City.



Japanese youth march down Main Street in Misawa wearing traditional Japanese clothing during the annual Mikoshi Festival.

whose mission is support. In addition to the Naval Air Facility and Naval Security Group Activity, Misawa also is home to Naval Pacific Meteorology and Oceanography Det., Personnel Support Det., Patrol Wing 1 Det, and Mobile Mine Assembly Unit 12 – to name only a few. Nearly every rate is represented somewhere at NAF Misawa.

Unaccompanied Sailors can enjoy the Zumwalt Award-winning barracks and adjoining dining facility. Families can shop at our award-winning commissary and exchange facility. DOD Schools provide the children of NAF Misawa personnel with a standard of education parents can be proud of. Sailors can earn credits and work toward their degree by taking courses from Central Texas College, University of Maryland and University of Oklahoma.

Misawa has some of the finest ski resorts and ice festivals in the country, attracting thousands of international tourists annually. The close proximity of these ski resorts and the wide range of MWR-sponsored activities keeps these activities very affordable.

Come see and enjoy for yourself the scenic wonders of northern Japan. Forget the congestion and noise of Tokyo and enjoy life in the peaceful, rural setting of Misawa. It could be your most exciting, challenging and rewarding tour yet.

Information provided by JO1 Lance Lindley, Commander, Naval Forces Japan, Public Affairs.

Fast Facts

Location: East of Lake Ogawara in a rural area of Aomori Prefecture. Aomori Prefecture makes up the eastern corner of Honshu, the main island of Japan.

Major commands: Naval Air Facility Misawa, Naval Security Group

Population: 16,000 military and civilan personnel

Facilities: Commissary; exchange; DOD school

Housing: 2,000 housing units; 68 three bedroom apartments; 68 two bedroom apartments; off-base housing also available

Internet: Naval Air Facility Misawa (www.cnfj.navy.mil/misawa.html)

Guam

It's an island paradise. Coconut groves, crystal clear waters and warm weather year round. It's also where America's day begins – the U.S. territory of Guam in the Western Pacific.

With numerous island fiestas and ancient villages spread throughout the island's jungles, Sailors can learn and experience the Chamorro culture, which is native to Guam and the Northern Mariana Islands.

Many diverse cultures thrive throughout the Micronesian islands just south of Guam. Dozens of exotic atolls are nestled into the Pacific waters and are ideal vacation spots for Guam-based Sailors with a weekend to burn.

Each island in the Federated States of Micronesia has its own unique culture and language, and the lagoons and oceans surrounding the islands provide for some of the best scuba diving in the world.

Sailors can leave the present behind and travel to an island paradise like Yap, where many of the locals still live as their ancestors did generations ago. Yap's monetary system can only be described as… well, ancient. The Yapese people use huge limestone discs, sometimes weighing as much as 1,000 pounds, as coins. Centuries ago Yapese men would risk their lives traveling by canoe to the neighboring island of Palau to quarry limestone with hopes of bringing back the largest coin. The value of the coin (ranging in size from 2 inches to eight feet in diameter) was determined by the danger of the journey involved in its retrieval and the amount of lives lost in the process. Thus, the more hazardous the expedition, the more valuable the coin.

Just east of Yap are the islands of Chuuk State (formerly known as Truk). For Sailors interested in scuba diving, Chuuk lagoon is the Mecca of sunken treasures. During World War II, an entire Japanese fleet was laid to rest at the bottom of the lagoon. Today those wrecks are a magnificent underwater museum for scuba divers, underwater photographers and marine biologists.



Photo by PH3 Heather Gordon-Eghball

Window Rock, which looks out over the Talofofo coastline, is one of many interesting hiking destinations at the southern end of Guam.

Getting stationed on the island of Guam offers Sailors and their families unparalleled opportunity to experience cultures untouched by time while experiencing the diverse and intriguing island cultures throughout Micronesia and the Marianas.

Information provided by JO2 Sharon M. Dewar and JO3 Alex Moss, Commander, Naval Forces Marianas Public Affairs.

Chamorro children learn the traditional dances of their ancestors in Agana on the island of Guam.



Sunset on the Philippine Sea, from Tumon Bay in the heart of Guam

Fast Facts

Location: Southernmost and largest of the Marianas Islands, 3,700 miles west of Hawaii. Guam's location and its harbor (Apra Harbor) make it ideal for logistic support of the U.S. 5th and 7th Fleets.

Major commands: Commander, Naval Forces Marianas; Naval Computer and Telecommunications Det.; Naval Hospital; Naval Special Warfare Unit 1; Helicopter Combat Support Squadron (HC-5); Explosive Ordnance Disposal Mobile Unit 5; USS *Frank Cable* (AS 40)

Population: 8,280 military and civilian personnel

Facilities: Navy Exchange; NFCU; USN hospital/dental; child care; local elementary and high schools; undergraduate and graduate opportunities

Housing: 2,350 2-, 3- and 4-bedroom houses on base; 1 to 2 month waiting list

Internet: Navy Guam (www.guam.navy.mil)



The Koreans celebrate the Buddha's birthday on the 8th day of the 8th month. This past year it was on May 3rd.

ET2(SW) Mark White pays a visit to Hayshiwon Orphanage in Seoul as part of an ongoing community action project.



Chinhae

The landscape of the Republic of Korea, or South Korea, varies from the rugged T'aebaek Mountains running the length of the eastern coast to the gentle slopes and plains of the west and south. Located on the southeast tip of the Korean peninsula, Fleet Activities Chinhae is only a short distance from the bustling marketplaces which make up the island's urban center of Pusan and minutes away from the beaches of the Southern Coast. In fact, by American standards anywhere in South Korea is a short distance away. Seoul, the nation's capital, is only seven hours by car.

Co-located with the largest Korean Navy base, Fleet Activities Chinhae is the only U.S. Navy installation in the country. Outside the gates, the city of Chinhae is growing rapidly as more than 130,000 residents work to support the Korean Navy shipyard and growing industrial enterprises. The base and the city overlook a bay dotted with islands and surrounded by pine-studded mountains.

Korea's second largest island, Kojedo, lies just south of Chinhae and is an hour-and-a-half ferry ride away. Once a POW camp during the Korean War, the island now hosts a thriving fishing and shipbuilding industry, along with first-class beaches and resorts.

The Republic of Korea, which is approximately the same size as Mississippi, contains 20 national parks which strike to the heart with their stunning, natural beauty.

South Korea is emerging as an economic force for Asia. Its cities, scenic geography and friendly people make serving in Chinhae duty in paradise.

Compiled from information provided by Fleet Activities Chinhae and U.S. Naval Forces Korea.

Fast Facts

Location: At the southeast tip of the Republic of Korea (ROK). The city of Chinhae is home to the only U.S. Navy Base in the ROK.

Major commands: Commander, Fleet Activity Chinhae

Population: 90 military, 100 family members, 9 DOD civilians

Facilities: AAFES exchange; post office; chapel; commissary; ATM; medical clinic; fitness center; gym; bowling alley; swimming pool; youth center; all hands club; DOD schools

Housing: 50 fully-furnished family units; ability to accommodate families with up to four children

Internet: U.S. Naval Forces Korea (http://144.59.63.170/chinhae.htm)

Singapore

Good things come in small packages. Singapore, located at the tip of the Malay Peninsula and strategically situated in the Straits of Malacca has been a stopping point for explorers and traders for hundreds of years. It lies at what can best be described as the crossroads between the Indian and Pacific Oceans. A location which has only added to the Republic of Singapore's unique cultural diversity.

The U.S. Navy's presence in this world-class port, while small, adds yet another facet to the country's diversity. Only about 100 Sailors (officer and enlisted) and 50 Navy civilians work in seven activities on the island of Singapore. However, these commands provide important support for the 7th Fleet.

The biggest problem facing Sailors in Singapore is not what to do, but what to do first. Singapore's location has helped it blossom into a world-class trade center and prime tourist destination. Its tropical climate makes it an ideal place for outdoor recreation, such as swimming, sailing, diving and golf.

Though the island is only 240 square miles, there is more than 60 smaller islets you can visit via water taxi and ferry, not to mention the Philippine islands, Australia or Thailand which are only a short boat ride away.

Singapore may be small, but its diversity and location make it an ideal duty station for those willing to experience new cultures and a few surprises.

Compiled from information provided by Commander, Logistics Force Western Pacific Public Affairs and Naval Regional Contracting Center Singapore.

Fast Facts

Location: Off the southern tip of the Malay peninsula and only 80 miles north of the equator.

Major Commands: Commander, Logistics Group Western Pacific; Navy Regional Contracting Center; Military Sealift Command; Fleet Technical Support Center Pacific Det.; Naval Criminal Investigative Service

Population: 90 USN; 39 DON Civilian Employees; 200 Family Members

Facilities: Navy Exchange; post office; NFCU; medical/dental clinic; sports complex

Housing: Former Royal Navy housing area including bungalows, duplexes and apartments for all permanently assigned personnel

Internet: Logistics Force Western Pacific (www.clwp.navy.mil); U.S. Naval Regional Contracting Center, (www.nrccsg.navy.mil)



Photo by: PH2(SW) Jett Dempsey

At Sentosa, an island resort near Singapore, Sailors can visit a water park or hike the nature trails.

A Singaporean in a traditional Indian sari purchases fruit in an open-air "wet market."



U.S. Navy Photo

Australia

"Travel is fatal to prejudice, bigotry and narrow-mindedness. Broad, wholesome, charitable views of men and things cannot be acquired by vegetating in one little corner of the Earth all one's lifetime."

– Mark Twain



Photo by IS2 Mike Gilligan



Photo by HM1 Tim Wermers

New friends, even of the marsupial variety, await PH3 Laura Wozniak in Brisbane, Australia.



U.S. Navy Photo

Sailors from USS Curtis Wilbur (DDG 54) try some white water rafting on the Tulley River near Townsville, Australia.

There is no winter without snow,
no spring without sunshine, and
no happiness without companions.







Photo courtesy of Korea National Travel Office

Kyung-bok Palace in Seoul, Korea, was used for state dinners and receptions during the Lee Dynasty.

Sailors learn how to get down and boogy with local Aboriginies in Cairns, Australia.



Photo courtesy of Korea National Travel Office

You can always get a good deal at the silk shop at Tongdaemun Market in Seoul, Korea.

Words have no wings
but they can fly
a thousand miles.

Korea



Photo by PHC Ted Salois

What's left of the original bridge over the river Kwai (lower left) and its replacement (background) in Thailand.

Thailand



U.S. Navy photo

A 7th Fleet Sailor rides an elephant in Thailand.



Photo by PHC Ted Salois

Traditional Thai dancer.

If you are going into the woods — don't leave your axe at home.

Malaysia



Photo by PH3 Aaron McGrath

The lights of Penang, Malaysia.



U.S. Navy photo

A Malay dancer performs for Sailors on board USS Blue Ridge (LCC 19) during a port visit.



Photo by JO1(SW) Steve Galvan

Bradley Barnett of USS Blue Ridge (LCC 19) enjoys a "taxi" ride in a rickshaw in Surabaya, Indonesia.

Don't think there are no crocodiles just because the waters calm.

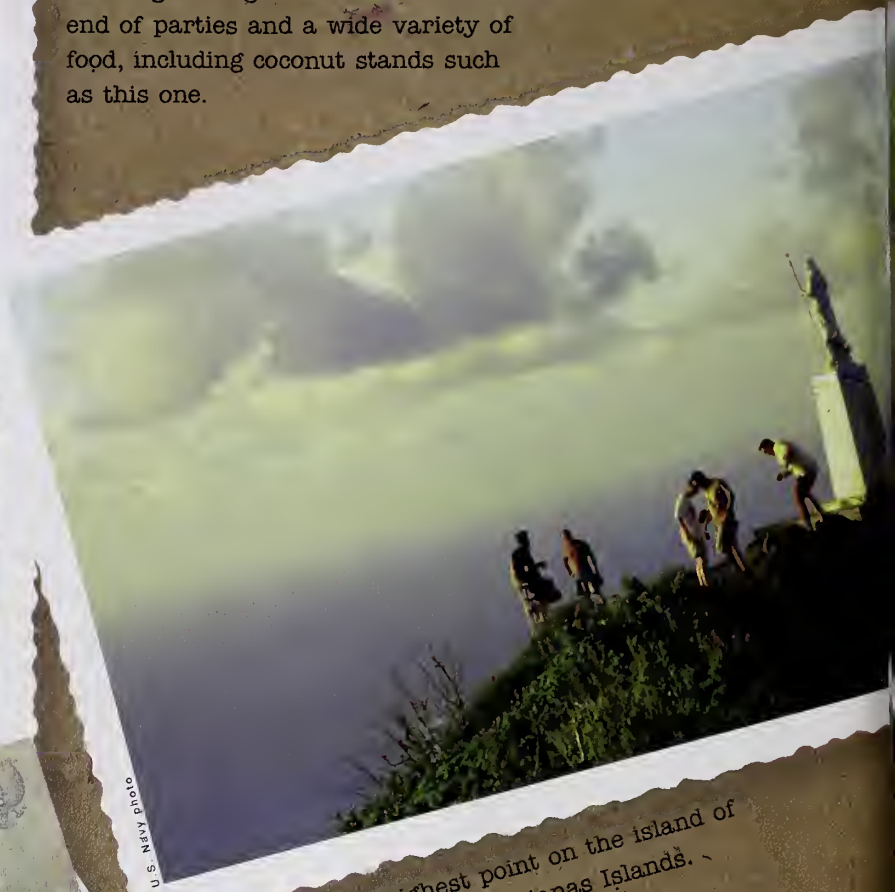


Indonesia



Photo by PH3 Heather Gordon-Eghball

The annual Catholic fiesta on the island of Rota attracts visitors from the neighboring islands for a weekend of parties and a wide variety of food, including coconut stands such as this one.



U.S. Navy photo

Sailors visit the highest point on the island of Saipan in the Northern Marianas Islands.



South Sea



Photo by JO2 Sharon Dewar

Give a man a fish and you feed him for a day. Teach a man to fish and you feed him for a lifetime.



Photo by PH2(SW) Jett Dempsey

Sailors from USS John S. McCain (DDG 56) and USS Blue Ridge (LCC 19) descend the Great Wall of China during a port visit to Beijing, China.

China

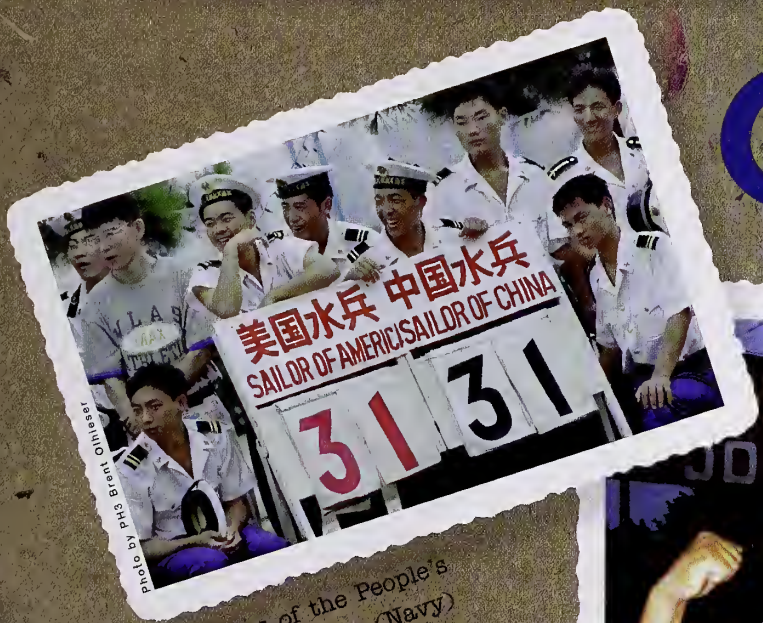


Photo by PH3 Brent Olinger

Members of the People's Liberation Army (Navy) enjoy a basketball game between Chinese and American Sailors in Quingdao, China.



U.S. Navy Photo

MS3 Philip Thomas (right), and a member of the People's Liberation Army (Navy) during a visit to Qingdao, China. The two participated in a "strongest man" contest by repeatedly pulling coil weights until one quit. Thomas won.

A Sailor hitches a ride on the back of a green sea turtle in the waters around the Republic of Palau where the scuba diving is world renowned.



Photo by PHC Ted Salois

A motorbike taxi takes riders to their destination in the Philippines.



Photo by PHC Ted Salois

Statue near the shoreline showing the return of Gen. MacArthur to the island of Leyte, Philippines.

Philippines

If you are going a long way, go slowly.



Photo by PH1 Jospeh J. Wilson

Singapore

The Tiger Balm Garden, better known as Haw Par Villa, is located in Singapore. It's famous for its Dragon Gateway.





Photo by JO1(SW) Steve Galvan

Sailors from USS Blue Ridge (LCC 19) visit a Russian monument in Vladivostok dedicated to Russian Sailors who died during World War II.



Photo by PHAN Adam Eastman

A group of Russian youths visit USS Blue Ridge (LCC 19), while several American sailors tell them about the weapons on board.

Russia

Conversation shortens the distance, singing lightens the load.

The future is for those who know how to wait.

You should climb Mount Fujiyama once in your life. Climb it twice and you're a fool.



Photo by PH1 James Hampshire

Riding up Mt. Fugi.



Photo courtesy of Japan National Tourist Office

A tori gate at Miyajima.

Japan



Photo by PHC Ted Salois

A scenic, underwater tunnel at an aquarium park in Tokyo.

The path ... in what is ... but men look ... what is remo...

Vision without action is a daydream. Action without vision is a nightmare.



Photo courtesy of Japan National Tourist Office

Grand Festival of Toshogu Shrine in Nikko.



Photo courtesy of Japan National Tourist Office

Sapporo Snow Festival.



7th Fleet Sailors take in the sights of downtown Hong Kong during a port visit.



U.S. Navy Photo



Photo by PH1 James Hampshire

The city is alive with lights, people and yes, traffic, in downtown Hong Kong.

ty lies
t hand,
it in

Hong Kong



Kaoru Hasegawa, age 21, as a lieutenant in the Japanese Imperial Navy.

KAMIKAZE

By JO2 Brigette Barnes

Most people go to work in the morning and feel pretty certain they will return home at the end of the day. Most people aren't Japanese kamikaze pilots. For members of the Japanese Special Naval Attack Corps, a day at the office meant never coming home again.

Kaoru Hasegawa was 21 years old in 1945 and a lieutenant in the Japanese Imperial Navy. Assigned to the 405 "Ginga" (which in English means Galaxy) Corps, Hasegawa was in command of the 10th Ginga sub unit, the unit which was ordered to attack USS *Callaghan* (DD 792) and sink her at all costs.

"In a special attack mission, if you were successful you didn't come back," explained Hasegawa, through a translator in a recent interview. "But everyday death was right beside us, so it wasn't as great a shock to me to be given this mission."

Still, the pressure was intense. "The psychological pressure was tremendous when I got into the airplane, because the success of the mission meant my ultimate death."

On the morning of May 25, 1945, Hasegawa, his crew and 11 other *Francis* aircraft took off from mainland Japan with orders to fly toward the eastern part of Okinawa and attack the American destroyer.

"It started raining very hard, so we had to fly at an extremely low altitude – between 75 and 150 feet," explained Hasegawa. The conditions were so poor, in fact, that every other plane in his formation was forced to return to base. Hasegawa, now alone – with the pressure of the mission and the hopes of his country resting squarely and completely on his shoulders – went on.

At 10 a.m., he and his two-man crew came upon USS *West Virginia* (BB 48), which immediately opened fire. While trying to dodge the attack from *West Virginia*, his plane was hit by gunfire from *Callaghan*.

Callaghan watched as the Japanese plane disappeared into the ocean, then she turned – and in a moment of great courage and compassion – began the search for survivors.

"The skipper didn't know when – or if – another Japanese attack might happen, but he still stopped his ship to rescue us," said Hasegawa. "It was a completely risky action. To this day, I am moved by the courageous actions he took."

Only Hasegawa and one other member of his crew, Warrant Officer Minato Yoshida, survived the crash. Hasegawa, having sustained a fracture to his right leg, was stabilized, transferred to USS *New Mexico* (BB 40) and then to the naval hospital on Guam. He remained a prisoner of war for 18 months before being returned to Japan. Yoshida was not so lucky. He died five hours after being pulled from the water and was given a burial at sea.

Two months later, *Callaghan* was sunk by another kamikaze attack and 48 crewmembers were killed.

For many years, Hasegawa could not think about – nor remember – much about that fateful day in 1945. But in 1995, 50 years later, Hasegawa met with members of *Callaghan* during a memorial ceremony. "I offered a flower wreath at the *Callaghan* Survivors Association," he said. "CAPT Haymark (executive officer aboard *Callaghan*) made a wonderful speech that I will never forget. He said, 'According to naval tradition, it is our duty to help any person in peril at sea, not only friends, but anybody.' Even today, that greatly moves my heart."

Hasegawa's meeting with the *Callaghan* survivors led to the establishment of an exchange program in which Japanese and American high school students visit each other's country to share their hopes for world peace. The program, co-sponsored by the Japan Youth Research Institute and the Navy Memorial Foundation of the United States, had its kick off this past summer in Washington, D.C.



Kaoru Hasegawa and the members of his aircrew prior to the fateful mission in 1945.

Hasegawa, now 74 years old and the president of an international corrugated packaging company, donated $10,000 to the Navy Memorial Foundation, saying, "I would like to express my sincere gratitude on behalf of my subordinate and myself for the polite, gentleman-like human spirit of the U.S. naval tradition," he said.

Hasegawa said he lives everyday with the belief that all people who gave their lives for their country, no matter what side they were on, should be remembered and honored.

Barnes is a photojournalist assigned to All Hands.

cybersailor@mediacen.navy.mil

CyberSailor

Cruising the Pacific

Well, after a month's hiatus (October was the Anyday in the Navy issue – if you haven't seen it, I highly recommend you pick one up because it's highly cool) your faithful cyber-servant is back to deliver to you, the Sailors of the U.S. Navy, the best of the cyber-scuttlebutt about new, innovative and informative websites. Since this month's issue of *All Hands* is devoted to Sailors in and around the Western Pacific, let's start there.

But before we do, can we get something straight? I receive hundreds of e-mails every week from webmasters all across the globe asking for feedback on their site. And if I had the opportunity I would critique each and every one right here in this column. Unfortunately, space is limited. So please don't be discouraged if you don't make "the big time" – so to speak. Hang in there and continue to update your site. If it is really hot, my intrepid staff will award it the coveted CyberSailor Site of Excellence (CSSOE) Award. The award has been designed and will be e-mailed to worthy webmasters soon.

One more thing, if you have any sites you really enjoy or would like to see me cover, please don't hesitate to e-mail me. Your ideas or comments are highly encouraged. Well, now that I got that off my chest… let's get going.

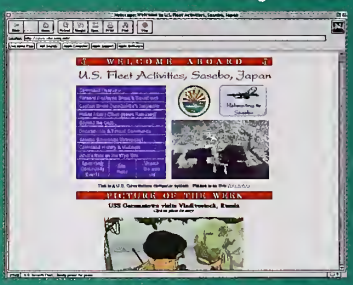
This month's featured sites cover some important areas in the Western Pacific – sites that transferring Sailors should definitely check out.

The first stop for anyone cruising the Pacific, should be at the site that covers the entire region, Commander, Pacific Fleet at **www.cpf.navy.mil.** While there click on the Pacific Fleet Directory for more websites. This listing is quite thorough. In fact, it has more sites than you can visit in a single session (unless you're REALLY bored and have NOTHING to do). From this point, you can visit Commander, U.S. 7th Fleet **(www.c7f.navy.mil)** and find out what our forces in the Western pacific are up to.

The Navy area commanders in the region have some very useful sites as well. Commander, U.S. Naval Forces Japan **(www.cnfj.navy.mil)** opens the door to our presence in and around Japan, as well as providing



NAF Atsugi website



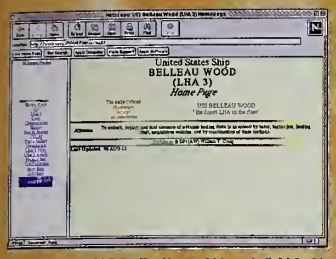
Fleet Activities Sasebo website



COMNAVFORJAPAN website



U.S. 7th Fleet website



USS *Belleau* Wood (LHA 3)



USS *Saipan* (LHA 2)



USS *Frederick* (LST 1184)

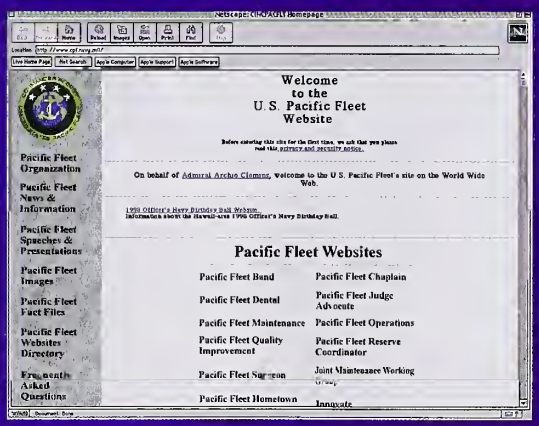
Gator Aces

It's time to once again recognize some outstanding Navy websites. This month it's the amphibious ships' turn.

Some sites are filled with GIFs and MIDI files and some are nothing more than plain text and a photo. As before, I visited each site as if I was about to be stationed on board and then compared the results with those gathered by my unbiased friend at Website Garage (**www.websitegarage.com**).

This month's winner doesn't have a lot of bells and whistles, but it's the quickest to load, is compatible with a variety of browsers and doesn't have any dead links or HTML design problems. So, I hereby award the coveted CyberSailor Site of Excellence Award (Gator Division) to USS *Belleau Wood* (LHA 3) at **www.navy.mil/homepages/lha3**. The ship's webmasters, DPI (AW) William T. Craig and PHI(AW) Essex D. Moore III, have done a great job providing balanced information about their ship.

In second and third place are USS *Saipan* (LHA 2) at **www.spear.navy.mil/ships/lha2/index.html** and USS *Frederick* (LST 1184) at **www.salts.navy.mil/ships/frederick**. And an honorable mention goes to USS *Nashville* (LPD 13) at **www.spear.navy.mil/ships/lpd13**.



U.S. Pacific Fleet website

...ks to Navy installations in country such as Fleet ...tivities Sasebo (**www.cfas.navy.mil**) and NAF ...tsugi (**www.atsugi.navy.mil**). In Korea, Commander, U.S. Naval Forces Korea (**144.59.63.170**) has info on the Western Pacific's "best kept secret" – Fleet Activities Chinhae. Cruise to **www.guam.navy.mil** and learn about the ...sland's many commands, including Commander, Naval Forces Marianas. While not an area commander, Logistics Force, Western Pacific (**www.clfp.navy.mil**) invites you to visit Singapore, while Navy Regional Contracting Center, Singapore (**www.nrcc.navy.mil**) has tons of stuff for Sailors planning a visit or accepting orders.

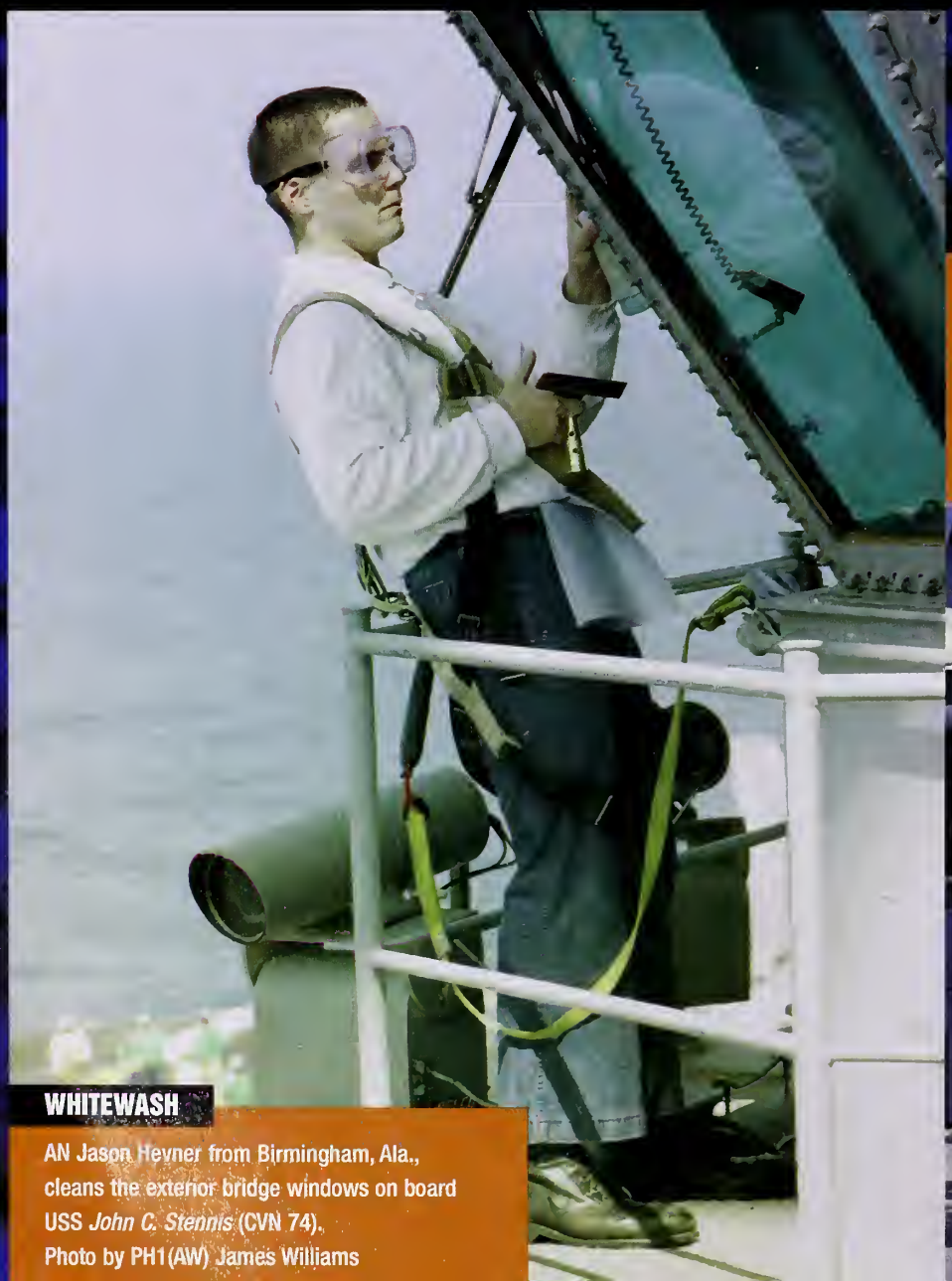
Before you get on a plane to the Far East, make sure you also check out all the non-Navy sites available for your destination. For example, if Japan is on your list, Schauwecker's Guide to Japan (**www.japan-guide.com**) gives a good overview of the country from a western perspective. The same type of site exists for almost every country in the world. Use your favorite search engine to find them.

Address for Life

Looking for a professional, personalized, lifetime e-mail address with a Navy twist? Check out ...ww.navy.org. You can get a Navy.org e-mail address – FREE – that will remain unchanged no matter how many times you transfer. You don't even have to be on active duty. Even after you retire, e-mail received at your permanent Navy.org address will be automatically forwarded to your current e-mail account anywhere in the world... free.

Eye on the Fleet

EYE ON THE FLEET is a monthly photo feature sponsored by the Chief of Information Navy News Photo Division. We are looking for HIGH IMPACT, quality photography from SAILORS in the fleet, to showcase the American Sailor in ACTION.



WHITEWASH

AN Jason Hevner from Birmingham, Ala., cleans the exterior bridge windows on board USS *John C. Stennis* (CVN 74).
Photo by PH1(AW) James Williams

YELLOW JACKETS

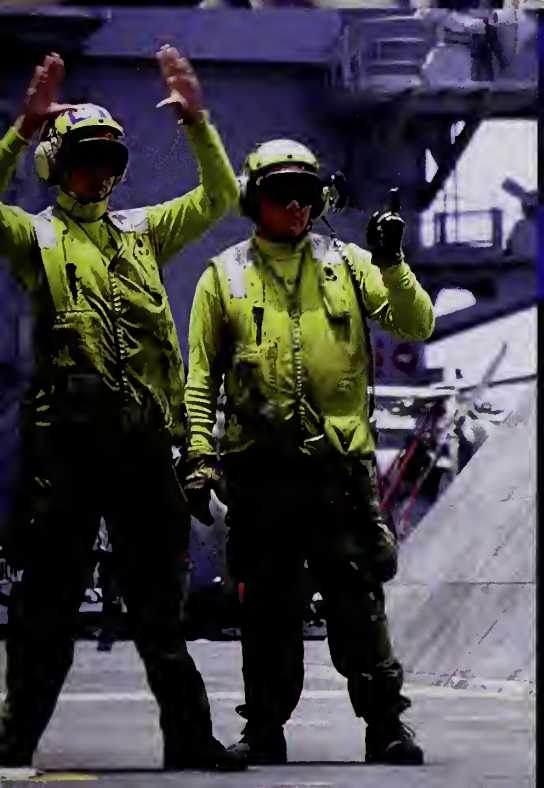
AN Kelli Cunningham (left) from Tempe, Ariz., and AB Scott Cook from Schenectady, N.Y., direct planes on board USS *Carl Vinson* (CVN 70) during *RIMPAC '98*. Cunningham is the first woman to handle aircraft on the flight deck of *Carl Vinson*.
Photo by PH1 Spike Call





STARGAZER

QM3 Jose Munoz from Las Cruces, N.M., navigates with a sextant from the bridge of USS *Coronado* (AGF 11) during *RIMPAC '98.* Photo by PH2 August Sigur



To be considered, forward your images with full credit and cutline information, including: full name, rank and duty station. Name all identifiable people within the photo and include important information about what is happening, where the photo was taken and the date.

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Eye on the Fleet



OVER THE LINE

King Neptune, CDR Perry D. Driver, makes a dramatic, sunrise arrival on board USS *John C. Stennis* (CVN 74) as the ship approaches the equator.
Photo by LT Wayne S. Grazio





ROOM WITH A VIEW

LCDR Donald B. Lesh from Columbus, Ohio, stands watch as the Tactical Action Officer (TAO) in the Combat Direction Center on board USS *Enterprise* (CVN 65).
Photo by PH2 Michael Pendergrass



TRACTOR PULL

AO3 Shawn Reed and AO3 Paul Deiulio ready their forklifts on the flight deck of USS *Enterprise* (CVN 65).
Photo by PH2 Michael Pendergrass

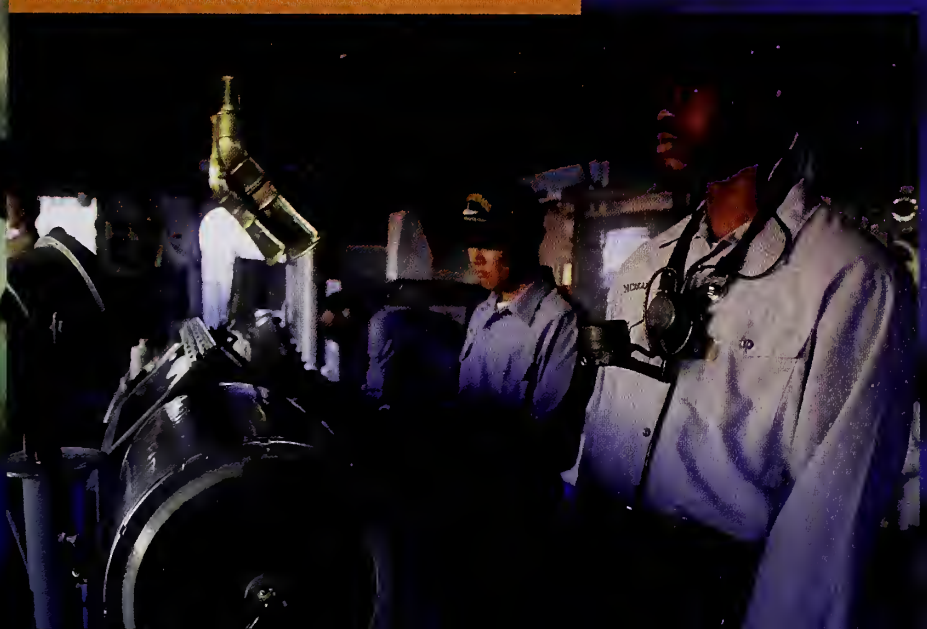
DUSK ON THE WATER

Sailors on board USS *Saipan* (LHA 2) enjoy a Mediterranean sunset after a rigorous PT session on the flight deck.
Photo by RM3 Jeffrey Tiemann



FULL SPEED AHEAD

On the bridge of USS *Coronado* (AGF 11), SR Jermaine McBean from Vallejo, Calif., maintains ship's speed while SA Tenzie Lhudup from Old Saybrook, Conn., steers a true course during *RIMPAC '98.*
Photo by PH2 August Sigur



Shipmates



Aviation Ordnanceman 3rd Class **Kevin T. Brown** received the Navy/Marine Corps Medal for his extraordinary heroism while serving as a SAR Swimmer assigned to Helicopter Combat Support Squadron 5, Det. 1, on board USNS *Kilauea* (TAE 26). Brown put his own life in danger by disconnecting from his hoist to save the crewmember of a sinking vessel racked by Super Typhoon *Dale*.



Dental Technician 1st Class **Elizabeth C. Fernandez** was named National Naval Dental Center, Bethesda, Md., 1997 Senior Sailor of the Year for her hard work, dedication and professionalism. Fernandez is currently assigned as Senior Enlisted Leader, Branch Dental Clinic, Patuxent River, Md.



Aerographer's Mate Airman **Jason M. Strobel** from Philomath, Ore., was selected as Mobile Environmental Team Yokosuka, Japan, Junior Sea Sailor of the Quarter for providing weather support on board USS *Nimitz* (CVN 68) during Operation *Southern Watch* and on board USS *Chancellorsville* (CG 62) during *RIMPAC '98*.



Navy Counselor 1st Class (SW) **Linda K. Maclean** from Layfayette, Ind., was selected as Afloat Training Group Pacific 1998 Sailor of the Quarter (2nd Quarter) for her dedicated service as Command Information Training Course coordinator.



Aviation Boatwain's Mate 2nd Class **James Elliott** was selected as Naval Station Roosevelt Roads 1998 Junior Sailor of the Quarter (3rd Quarter). Elliott serves as fuels division accounting supervisor, divisional training petty officer, and information systems security manager. He also volunteers as a varsity girl's basketball coach at Roosevelt Roads High School.



Aviation Structural Mechanic Hydraulicsman 1st Class (AW) **David Benavidez** was selected as Naval Air Pacific Repair Activity Atsugi, Japan, 1997 Sailor of the Year. Benavidez exhibited a high degree of professionalism in his duties as standard, depot-level maintenance, in-service repair and customer service coordinator for aircraft in the Western Pacific and European Theaters.

Did you know?

Kanji is the most complicated part of the Japanese written language. It includes many thousands of characters that have been adopted from the Chinese. Each *Kanji* is derived from a picture or combination of pictures and is ordered by the number of strokes it takes to draw the character.

Known as Siam until 1939, Thailand is the only Southeast Asian country not colonized by Europeans (although it did fall under Japanese occupation during World War II and was, nominally, a part of the Axis Powers). The ruins throughout northern Thailand are the remnants of kingdoms whose royal lineage extends all the way to the current king.

Japanese, a Ural-Altaic language linked to Korean, Hungarian, Turkish and Finnish, is the only language widely spoken in Tokyo. The spoken language is called *Nihon-go*, but the language taught in schools and spoken on television, *Koku-go*, is the de facto national language. There are also numerous regional dialects.

Singapore is a small island country in Southeast Asia consisting of a large island and more than 50 smaller islands. The large island, which is also called Singapore, covers 221 square miles. The other islands, more than half of which are uninhabited, have a combined area of about 17 square miles.

Japan consists of four major islands (Hokkaido, Honshu, Shikoku and Kyushu) and thousands of smaller ones with a combined total of 17,000 miles of coastline. Two-thirds of the country is covered in mountains. Japan has more than 70 volcanoes, which make up part of the Pacific's "Ring of Fire" – an enormous circle of volcanoes along the edge of the Pacific Plate that runs through the Philippines, New Zealand, California and Alaska.

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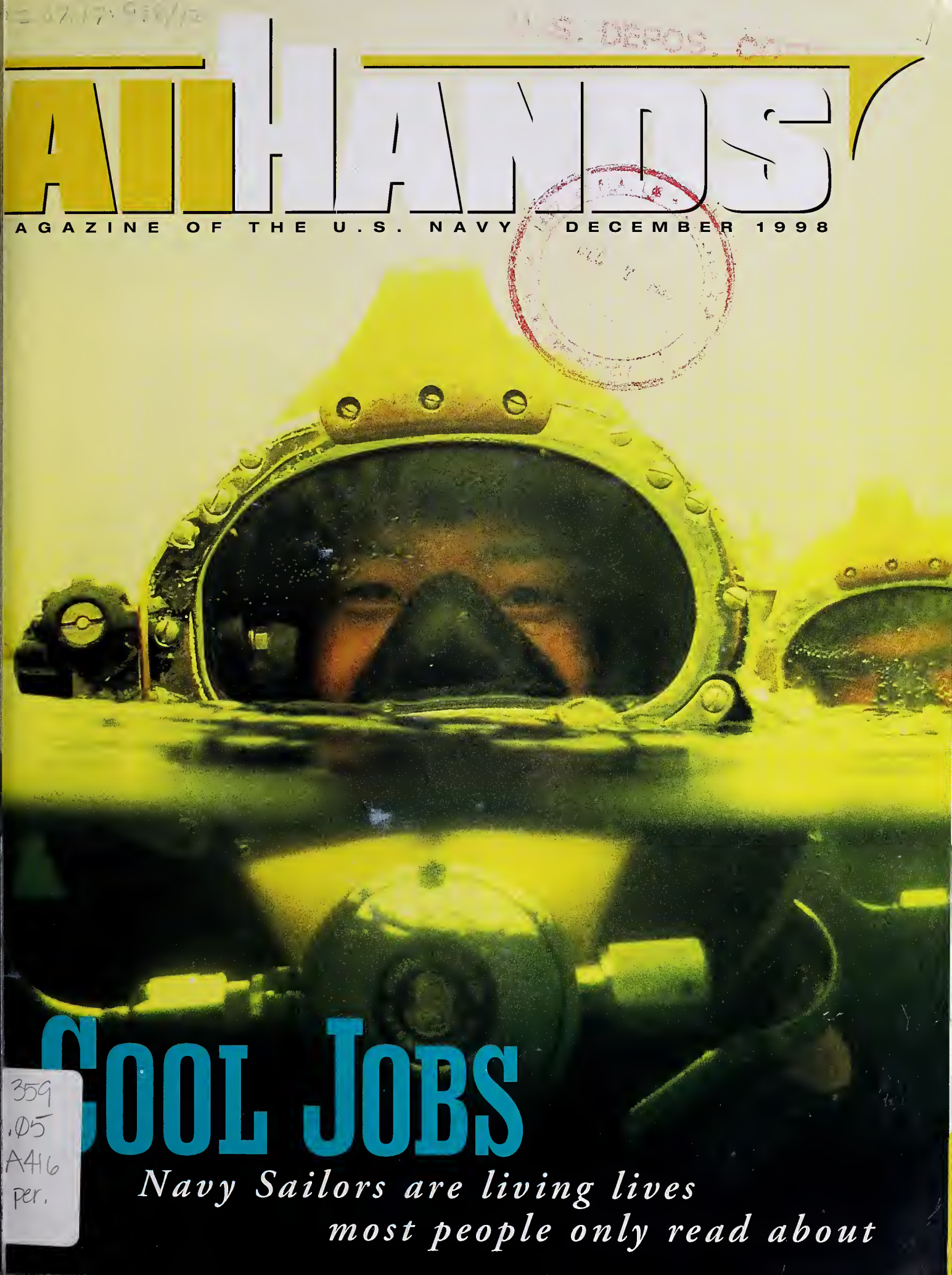
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December

Features

12 **My Mommy's a Mermaid**
CM2(DV) Lisa Correa gets called all kinds of names – "Mud Puppy," "Mermaid" and "Seabee Jane," to name only a few. But for this Sailor, wife and mother, the only name that matters is her new title of "Seabee Diver."

14 **Sculpting Sailors**
BMC(SW) Jeffery Dickinson is currently pushing his 11th division at Recruit Training Command Great Lakes, Ill., having instilled in more than 900 young men and women the Navy's Core Values of Honor, Courage and Commitment.

16 **And the Band Played On**
MU1 Connie Frigo is a 26-year-old saxophonist, a lover of music and a proud member of the U.S. Navy Band.

20 **True Blue**
AS2 LeJuan Clay and AE1 Karen Marini keep the Blue Angels looking great and flying high.



All Hands

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24 **High Plains Drifter**
RM2 Kurt Essebaggert, a Navy recruiter in the tiny Nebraska town of Scottsbluff (pop. 13,566) drives thousands of miles each month inviting young people to "Join the Adventure."

28 **Austauschsoldat [Exchange Soldier/Sailor]**
STGCM(SW) James Stone and ETCS(SW) Rick Breininger are more than just Sailors – they are U.S. Navy Ambassadors, serving in the German navy as part of the Personnel Exchange Program.

32 **Torpedo Chaser**
QM1(SW) Jon Thurston is "the man." He commands an 85-foot torpedo retrieval boat based out of Pearl Harbor.



On the Cover
CM2(DV) Lisa Correa recently received her certificate from the Naval Construction Training Center's Underwater Construction School, becoming the first African-American woman to qualify as a "Seabee Diver."

Photo by JO1 Rodney Furry



On the Back Cover
Newly-appointed Secretary of the Navy Richard Danzig hits the deckplates running by talking with – and listening to – Sailors.

Photo by PHCS Terry Cosgrove

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Photo by JO1 Robert Benson

36 **Quantum Leap**
OS2(SEAL) Michael Ford and his Leap Frog teammates perform all across the country in more than 50 precision, free-fall demonstrations a year.

40 **Aquaman**
PRAN Randy Hooks has a special friend named Dinky. Dinky is a 24-year-old Atlantic bottle-nosed dolphin and a member of the Navy's Marine Mammal Program.

Departments

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42 CyberSailor
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OCTOBER CORRECTIONS:
The Sailor featured on the cover is a radioman not an electronics technician as was indicated in the caption.
The ship featured on pgs. 9 and 44 was wrongly identified as USS *Fitzgerald* (DDG 62). In both cases, the ship pictured is actually USS *Chancellorsville* (CG 62).

Check us out Online at:
www.chinfo.navy.mil/navpalib/allhands/ah-top.html

CAT | FLIGHT

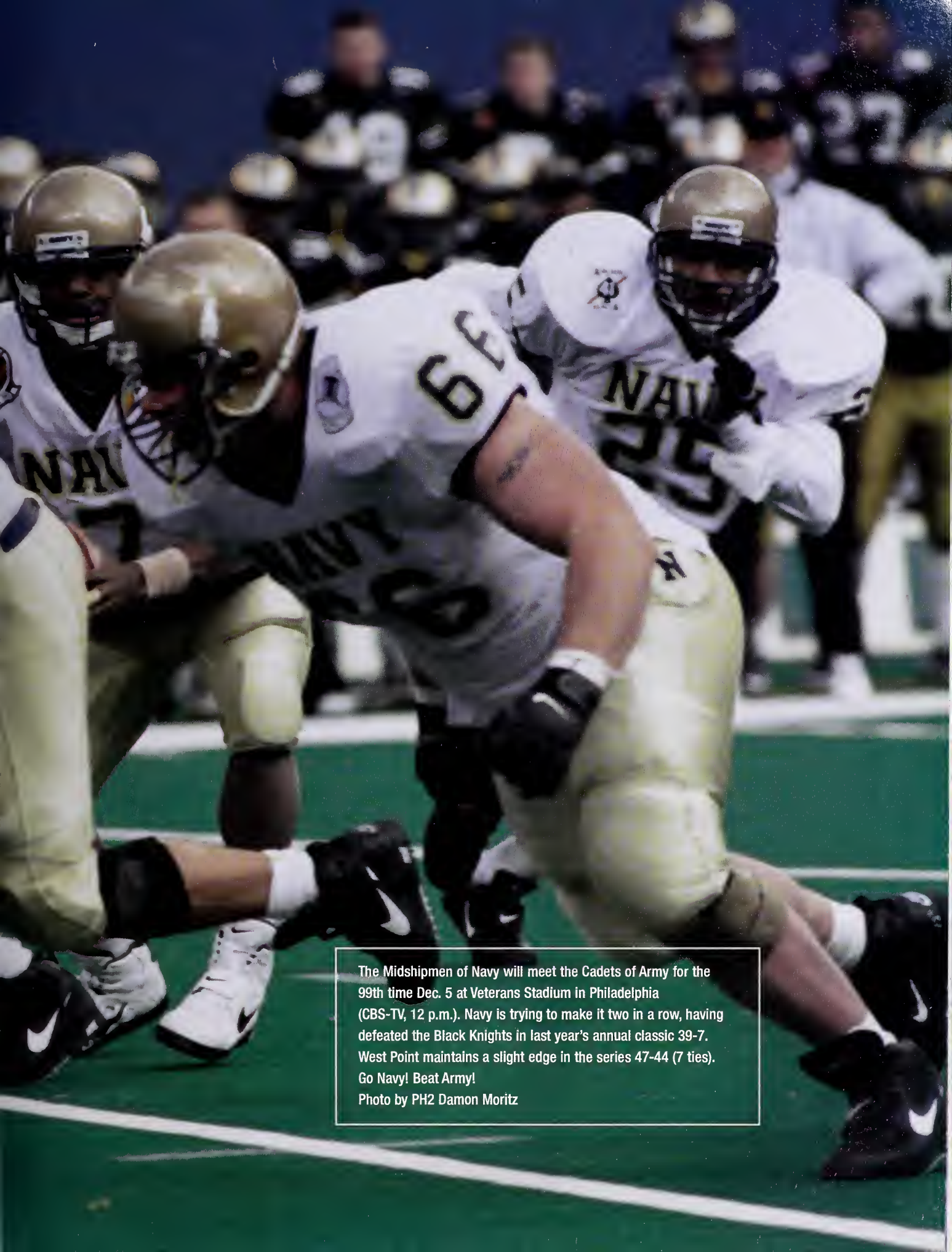




An F-14 *Tomcat* assigned to Fighter Squadron 102 (VF-102) flies over the coral reefs of Puerto Rico during a recent deployment.
U.S. Navy photo

CLASH OF THE TITANS





The Midshipmen of Navy will meet the Cadets of Army for the 99th time Dec. 5 at Veterans Stadium in Philadelphia (CBS-TV, 12 p.m.). Navy is trying to make it two in a row, having defeated the Black Knights in last year's annual classic 39-7. West Point maintains a slight edge in the series 47-44 (7 ties). Go Navy! Beat Army!
Photo by PH2 Damon Moritz

Around the Fleet

Navy Divers Search for Answers



Photo by PH1 Todd P. Cichonowicz

HTC(DV) Charles Catoe and GM2(DV) Jim Urban of MDSU-2 prepare for a dive on board USS *Grapple* (ARS 53).

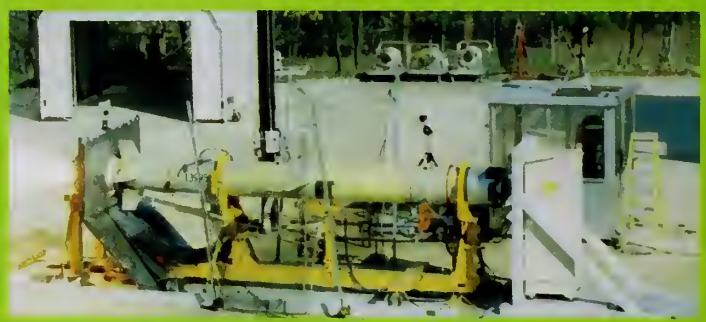
Thirty-two Sailors from Mobile Diving and Salvage Unit 2 (MDSU-2) recently accompanied the rescue and salvage ship USS *Grapple* (ARS 53) to Nova Scotia, Canada, where they assisted Canadian authorities in the recovery of victims and wreckage from the crash of SwissAir Flight 111.

Because of the extremely low visibility in the area of Peggy's Cove where the MD-11 went down, the Navy brought with it a newly-developed piece of hardware to assist in the underwater search. The equipment is part of a larger suite of underwater sensors developed to hunt mines and includes a Synthetic Aperture Sonar and a Laser Electro-Optics Identification System – both of which are used to provide detailed images of the ocean floor. The complete suite is called the Mobile Underwater Debris Survey System and was operated from the Canadian Coast Guard vessel CCGV *Hudson*.

Story courtesy of Navy Office of Information East, New York.

Block II *Tomahawk* Ready For Y2K

A Block II *Tomahawk* missile recently passed a Year 2000 Functional Ground Test at Naval Surface Warfare Center, Indian Head, Md. The test proved the missile's readiness to operate past Jan. l, 2000, and was part of the routine reliability assessment program run by Program Executive Officer for Cruise Missiles and Joint Unmanned Aerial Vehicles.



The Year 2000 (Y2K) problem is rooted in the potential inability of certain time/date dependent microprocessors and software programs to recognize the year 2000, thereby causing the possible failure and/or degradation of related systems.

Prior to the live firing, several simulated Y2K test runs were conducted. These included a simulated launch made in 1999 with a landing in 2000, another simulated launch made in 2000 and a third simulated launch made Feb. 29, 2000, to ensure the program recognizes a leap year. The actual firing run consisted of a launch in 1999 with the rollover to 2000 occurring approximately 60 minutes into a 191-minute flight. All tests, including the live firing, were successful.

The missile was strapped into the test stand for the duration of the "flight," which included rocket motor firing and separation; separation of all jettisoned items; deployment of fins, inlet ducts and wings; and operation of the cruise engine, fins and guidance systems. Launch commands and navigation inputs were provided by simulators to the missile so that its guidance and control system received the same signals as it would in actual flight.

A Functional Ground Test with additional Y2K objectives will be conducted on a Block III *Tomahawk* this November.

Story provided by PEO(CU) Public Affairs.

Navy Assessment Center to the Rescue

There are some new sheriffs in town and they are working to drive the Y2K Bug from Navy facilities and bases worldwide. The Navy Assessment Center in Port Hueneme, Calif., has been established by Naval Facilities Engineering Command (NAVFAC) to help ashore commands locate their Y2K weaknesses. Some of the services provided by the Center include:

- Inventory assessment using the Navy Compliance Data Base.
- Research of Y2K impact on those items that are not in the data base.
- Risk Assessment of non-compliant Y2K items.
- Guidance on repairs, cost, timeline and contingency planning.

Your command should contact them today and provide electronic or hard copy inventory data via the specially-designed Y2K inventory data collection forms, which can be downloaded at the NAVFAC Y2K website **(www.nfesc.navy.mil/y2k)**. Completed forms should be forwarded either by e-mail to **nfescy2k@nfesc.navy.mil** or via conventional mail to:

Y2K Help Desk
Naval Facilities ESC
Code 21
1100 23rd Avenue
Port Hueneme, CA 93043

For further information, call 805-982-1368, DSN 551-1368, or e-mail **nfescy2k@nfesc.navy.mil.**

Countdown to the Millennium

DAYS	HOURS	MINUTES	SECONDS
396	16	29	59

Embedded Chips - Dispelling Some Myths

The very essence of the Year 2000 (Y2K) problem is the potential failure of devices that rely on embedded chips for date/time information. Non-Y2K compliant chips will not comprehend the calendar rollover from 1999 to 2000, and, as a result, machines that rely on them may fail. If this problem gives you a cold sweat, you're not alone. All over the world, organizations are assessing their vulnerability to embedded chip failure.

Unfortunately, there's no quick fix for the problem, but you can minimize its impact by applying some good, old fashioned horse sense.

Essentially, the embedded chip problem boils down to one question: Does the device use a calendar to schedule events? The person with the most technical knowledge of the machine can best answer this question. If no one knows, someone should contact the manufacturer, distributor or service facility to find out.

The next obvious question is, "Is it capable of displaying the date?" While not sufficient for a conclusion, this is a helpful question to explore. If the date can't be displayed, it can't be changed. If it can't be changed, it can't be set. If it can't be set, it can't hamper the operation of the equipment.

Consider a video cassette recorder (VCR) with its perpetually blinking clock. You can set the clock and calendar as soon as you power up the machine. Unplugging it causes the clock to "forget" everything. When you plug it back in again, the clock reverts to blinking, but the machine is still functional. It simply means you don't know what time or day it is until you reset the clock and calendar.

The bottom line is that everything with a power cord or a battery is not necessarily a failure waiting to happen. Take a good look around your work-center and evaluate each piece of gear or system in it using the handy checklist below. If you're not sure about a device, ask your LPO or Division Officer for guidance.

Remember: if there's no way to display the date, even on a device with a microprocessor installed, the device is not likely to fail. (Sometimes a date may only be displayable when the device is connected to a piece of diagnostic equipment.) If there is a displayable date function, but no on-board power supply providing continuous power when the device is unplugged, Y2K is also not likely to kill it.

Lastly, if a device in question has any impact on crew health or safety and you are uncertain whether a date problem would cause that device to fail, keep it on your inventory of items requiring a complete Year 2000 check. Never compromise safety, even if you are 99% certain the item poses no Year 2000 risk. That last 1% uncertainty could kill or injure a shipmate.

Story by Dave Bettinger, Director for Business Solutions for CST2000, LLC, Portland, Maine, and Co-leader for the Society for Information Management's (SIM) International Year 2000 Working Group. He is also a former YN1 who served tours at Naval Station Roosevelt Roads and with Patrol Squadron 10 (VP-10). He has written numerous articles and spoken throughout the United States on Year 2000 issues.

EMBEDDED CHIP CHECKLIST

1. **Does the device operate with electricity? If no, it's low risk. If yes, keep reading.**
2. **Does it have a battery or power supply? If no, it's still low risk. If yes, look further. Low risk items include hair dryers, analog clocks, electric pencil sharpeners.**
3. **Does it have a display? If no, it's low risk. If yes, keep going. Low risk examples include refrigerators, paper shredders, older microwaves.**
4. **Does it have a microprocessor? If no, it's low risk. If yes, keep looking. Low risk items in this category include television sets, stereo equipment, computer monitors.**
5. **Does it have a calendar? If no, low risk again. If yes, look further. Low risk items include microwave ovens, coffee makers, printers and most copiers.**
6. **Does the device use a calendar to schedule events? If no, it's low risk. Examples: digital clocks or calendars that don't schedule anything, cameras, watches, etc. Examples of high risk items include: phone systems, fax machines, irrigation systems, energy management systems that control lights, heat, etc., based on time and date.**



Buying and Selling the U.S. Navy



Photo courtesy of USAOPOLY

Wouldn't it be nice to own your own F/A-18E *Super Hornet*? How about a nuclear submarine or an aircraft carrier? Heck, how'd you like to buy an entire Navy base? Pick up the newest edition of Monopoly and you can – the "U.S. Navy" edition, that is. USAOPOLY, a California-based company, is paying tribute to Navy Sailors – past and present – with a somewhat salty version of the classic board game.

Monopoly has been a part of American culture since 1934, when it was introduced by inventor Charles Darrow from Germantown, Pa.

The Navy version mirrors the original's design, but now instead of buying "Boardwalk" and "Park Place," you can get the deeds to a P-3 *Orion*, an F-14 *Tomcat*, the Blue Angels or USS *Arizona*.

As players move their specially-designed, pewter game pieces (submarine, anchor, helicopter, jet, white hat, battleship, aircraft carrier and shooter) around the board they prepare ships for getting underway, light off main engines, rotate watches and sound General Quarters.

"We've tried to capture the excitement and tradition associated with this branch of the Armed Forces," said Dane Chapin, President and CEO of USAOPOLY. "We hope Navy admirers will enjoy this classic American game."

The new game should be in Navy Exchanges just in time for the Christmas season.

Story by JO2 Brigette Barnes, All Hands.

Nothin' But a Hound Dog



Photo by JO1 Bill Austin

HM2 Greg Bishop as his alter ego, Elvis.

Elvis is alive and he made a grand entrance at the annual "Sea N Sky Fest" at Naval Air Station Whidbey Island, Wash., when the "Flying Elvi" parachuted onto the base. Among the gaudy, sequined men of the Las Vegas-based aerial team is a black-wigged, curled-lipped petty officer assigned to Branch Medical Clinic, Marine Corps Logistics Base, Barstow, Calif.

Hospital Corpsman 2nd Class Greg Bishop from Louisville, Ky., has a passion for jumping out of airplanes – a passion which led him to become a skydiving instructor and eventually to audition for the "Flying Elvi." (That's the plural of Elvis.)

"Being a 'Flying Elvi' is the greatest thing in the world, man," said the sideburned-Sailor in a passable Memphis accent from behind his mask as "The King."

All ten members of the "Flying Elvi" are pro-rated skydivers, with a team average of more than 1,500 jumps each. They come from a wide variety of occupations including teacher, health inspector, pilot, writer, real estate agent… and now, U.S. Navy Sailor!

Story by JO1 Bill Austin, Naval Air Reserve Public Affairs.

By Master Chief Petty Officer of the Navy MMCM(SS/SW/AW) Jim Herdt

Speaking with Sailors



Photo by JO1 Robert Benson

Q: When the new utility uniforms come on line, what is the Navy planning to do with the surplus dungarees? Are there any recycle programs planned?

- AW2 Jack Wolfkill, VP-69

A: We have considered many options, but NEXCOM believes that most of the dungaree stock will be depleted by Jan. 1, 2001, when the utility uniform becomes prescribable. During the two-year transition period, the new-style utility will be an optional uniform, and dungarees will continue to be sold. This will assist in depleting the current stock of dungarees.

We are also issuing recruits five sets of dungarees through Jan. 1, 1999, at which time they will receive three utility uniforms and one dungaree uniform. Beginning Jan. 1, 2000, recruits will receive four utility uniforms. When utilities become prescribable on Jan. 1, 2001, any dungarees left in Navy inventory and in Sailors' possession will become organizational clothing.

I suspect there will be a great desire to shift to the new uniform as soon as possible. By Jan. 1, 2001, all E-6s and below will have received two yearly clothing maintenance allowances that will allow the purchase of four sets of utilities. We want all Sailors to plan accordingly. During the two-year optional period, E-6 and below will be required to have four sets of working uniforms in their possession, which may be either dungarees, utilities, or a combination of both.

Q: Retention of young Sailors is a big issue, but how does the Navy approach this issue with young nuclear Sailors when shore duty opportunities are very limited?

- MM2(SS) Lozano, USS Georgia (SSBN 729)

A: Nuclear-trained submarine retention requires some improvement for second- and third-term Sailors to meet steady-state manning requirements, but first-term retention is currently falling within the required retention goals. For the past ten years, the submarine force has been downsizing. As a result, lower overall retention rates were acceptable, even desirable, to proportionally reduce the entire force structure. Now that the submarine force downsizing is nearing completion, we have to reestablish the retention rates that support a steady-state force structure. We have begun taking steps to improve overall retention, including:

- Increased retention requirements for Zones A, B and C.
- Increased Selective Reenlistment Bonus (SRB) ceiling to the legislative limit of $45,000 (from the previous cap of $30,000) and increased SRB multiples for select ratings and zones. Additional adjustments to SRB multiples may be required to achieve the desired retention goals.
- Increased Special Duty Assignment Pay (SDAP) for nuclear-trained submarine supervisory personnel at sea (targets second- and third-term personnel) from $175 to $220/month shortfalls.

Speaking with Sailors **is a monthly column initiated by the Master Chief Petty Officer of the Navy as a way of reaching out to the men and women of the fleet, whether they are stationed just down the road or halfway around the world.**

Sifting Through the Years

Most Sailors were in kindergarden during the war in Vietnam. For them, Vietnam is a piece of history – remembered in black and white film clips and old photographs in dust-covered copies of LIFE magazine.

But, for one Sailor in Joint Task Force-Full Accounting, (JTF-FA), Vietnam is more than just a memory. It is also home. When Cryptologic Technician (Interpretive) 2nd Class Dat Mai, 27, was seven-years-old his family climbed into a small boat to escape the war which ravaged his homeland. The small boat full of fellow refugees carried the Mai family from Cam Ranh Bay, in what was then South Vietnam, to the Republic of the Philippines. His family later settled in Portland, Ore.

"We just got tired of hearing bombs exploding," said Mai.

Mai joined the Navy nine years ago, figuring his Vietnamese language skills would serve him well as a linguist. He was right. JTF-FA's mission is to conduct investigations and excavations to achieve the fullest possible accounting of those still missing from the war in Southeast Asia (Vietnam, Laos and Cambodia). His ability to speak Vietnamese and his cultural background has made Mai an invaluable member on the JTF-FA team. He is a



Photo by JO2 Jeffrey McDowell

CT(I)2 Mai talks about his childhood in Vietnam.

member of a 12-man Recovery Element (RE), a team which travels in-country looking for personal effects and/or human remains.

The RE teams frequently hire local Vietnamese men and women to assist them in the digging and screening process. It's not uncommon to have 50 to 75 local villagers helping out at a recovery site – making Mai's Vietnamese language skills extremely valuable.

Mai can usually be found on site under a bright blue tarp giving instructions to the local villagers as they sift through thousands of cubic feet of soil. A screening station usually consists of eight to 12 screens made of 1/4-inch mesh wire. The work is grueling. Temperatures can reach 100 degrees.

Mai also serves on Investigative Elements (IE). His job is to assist in interviewing potential local witnesses about incidents from the war, which might help the IEs correlate an unaccounted-for service member to a particular site. Quite often in the course of these interviews, a Vietnamese witness, will offer to take the IE to the actual site where the service member was last seen or buried.

There are currently 2,081 service members still unaccounted-for from the war in Southeast Asia. Of those, 1,554 are believed to be in Vietnam.

"We should continue to look for those men and women who made the ultimate sacrifice for their country. It's the honorable and humanitarian thing to do," said Mai.

He is then interrupted by the woman next to him who is pointing at her screen. He stops and reaches into the screen and plucks out what appears to be a small clump of dirt. He takes his trowel, gingerly taps on it and after brushing it off, holds up a small brown vial of water treatment tablets still unopened after 30 years. He gingerly places the vial into a bucket with other artifacts and quietly resumes his search for those still unaccounted for from the Vietnam War.

Story by JO2 Jeffrey McDowell, CINCPACFLT Public Affairs.

CNO Testifies About Navy Readiness

Chief of Naval Operations ADM Jay L. Johnson and the other members of the Joint Chiefs of Staff testified on military readiness before the Senate Armed Services Committee Sept. 29.

In his opening statement, ADM Johnson said, "Our deployed mission readiness is good and we are indeed able to carry out our missions. Our tip-of-the-spear forces are doing superb work and that should both reassure you and make you proud."

ADM Johnson told committee members that his number-one, short-term concern is taking care of Sailors.

"I would offer the following waterfront perspective having just returned from the Pacific Northwest. The resilience and espirit de corps of our men and women is no surprise to you, and it is most gratifying to me.

"But they indeed have very serious concerns. They're working harder with no end in sight, they're underpaid relative to what's available to them on the outside, they believe the Redux Retirement System is broken, and they're frankly tired of being asked to do more with less. These things are on their minds as they make career decisions."

The CNO continued by reiterating his immediate concerns, including pay, retirement, OPTEMPO and quality of life.

ADM Johnson's long-term concerns centered around building more ships. "We can't sustain the Navy with the budget we have. Our sailors are counting on us to do something now."

Story by JO2 Chris Alves, CNO Public Affairs.

Anchors Aweigh Named 5th Best Fight Song

Anchors Aweigh, the Naval Academy fight song, ranks as the fifth best fight song in the nation according to a new book, *College Fight Songs: An Annotated Anthology,* to be released this fall. The book is written by Northern Illinois University Professor William Studwell.

Top 10 College Fight Songs

1. Notre Dame Victory March • **2.** The Victors – University of Michigan • **3.** On Wisconsin • **4.** Down the Field – Yale University • **5.** Anchors Aweigh • **6.** Stein Song – University of Maine • **7.** Fight on USC • **8.** Ramblin' Wreck from Georgia Tech • **9.** The Eyes of Texas • **10.** Across the Field – Ohio State

Bataan Aids in Disaster Relief

The Norfolk-based USS *Bataan* (LHD 5) arrived in Puerto Rico Oct. 7 for its first operational mission, "Operation Fundamental Relief," to assist with cleanup from the damage inflicted by Hurricane Georges.

Approximately 750 Marines, 100 Sailors and a small unit of soldiers combined forces with *Bataan's* crew of 970 for the crucial mission.

Bataan's primary mission is support for Marines ashore, using its flexible capabilities to provide logistics support, conduct boat operations and function as an airport to more readily reach isolated disaster areas quickly and effectively.

"I'm excited because it feels like we finally have a pay-off after all the hard work of commissioning," said Radioman 2nd class Liliana Armenta from Los Angeles. Armenta continued by explaining that humanitarian missions and the opportunity to have an impact on the world around her were two major factors which initially attracted her to the Navy.

"I just thought there had to be life outside of Los Angeles," Armenta said. "I plan to volunteer for as many functions as I possibly can.

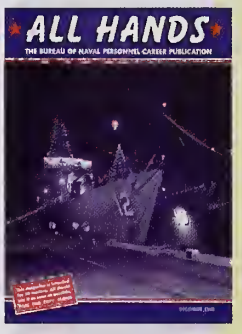
"As a diplomat to all these different people, I want to prove the Navy is an effective ambassador."

Story by JO3 K.J. Lettow, USS Bataan *(LHD 5) Public Affairs.*

TIME CAPSULE

DECEMBER 1968

All Hands recognizes the Chaplain Corps and its 1,100 members for their service at home, on ships at sea, and with troops in Vietnam.



The Naval Photographic Center, Washington, D.C., celebrates its 25th anniversary while producing more than 150 movies a year, a feat which earns it the title "Little Hollywood."

The Deep Submergence Systems Project moves one step closer to improving its capabilities for deep-sea search, rescue, salvage and diving with the announcement that DSRV-1 is almost ready for delivery and sea trials.

USS *Sacramento* (AOE 1) completes more than 570 replenishments during her third Vietnam deployment, providing her customers with more than 38 million gallons of aviation gasoline and 2,000 short tons of provisions and freight. She also provides transportation for 930 passengers for transfer to other ships, delivers 57,140 pounds of mail, supplies almost 254,000 gallons of water and transfers more than 14,000 short tons of ammo.

And, finally, ship departments aboard USS *Franklin D. Roosevelt* (CVA 42) make giant Christmas cards for display in the hangar bay to celebrate the season.

CNO Announces More Reductions in IDTC

In a Navywide message sent Oct. 15, Chief of Naval Operations ADM Jay L. Johnson announced further reductions in the number of inspections required during the time between deployments known as the "Inter-Deployment Training Cycle," or IDTC.

The newly-issued changes include:

- Elimination of all SECNAV/CNO special interest items requiring mandatory inspection and reporting.
- Immediate cancellation of an additional 15 inspections and assist visits.
- Consolidation of 72 inspections/certifications.
- Transformation of 27 inspections/certifications into optional assist visits.

These reductions are the second in a series of changes designed to cut the number of inspections, streamline training, increase commanding officer flexibility and improve quality of life for Sailors during IDTC.

The first set of reductions was announced Sept. 25, and included the elimination of five command inspections (On-site Command Inspection, 3M Inspection, PQS Inspection, Intelligence Inspection and ADP Security Inspection) and a 60% reduction in the basic training phase of IDTC, an increase in the time between underway material inspections by INSURV, a boost to the meaning of "stand down" during the 30-day post-deployment period, and the establishment of a Fleet Review Board to study and propose additional training and inspection efficiencies.

"This is a further step in the right direction to unburden the non-deployed side of our lives," the CNO wrote in his message.

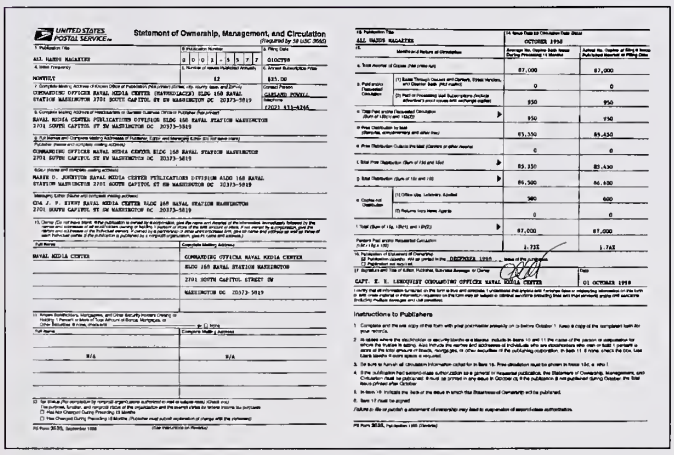
"The IDTC initiatives will permit commanding officers to have more discretionary time and allow Sailors more time at home with their families."

The CNO also pointed out another important aspect of the IDTC initiative – creating a new level of trust at the commanding officer level.

"This, of course, requires our commanding officers to embrace this enhanced responsibility and exercise their authority to ensure operational primacy – readiness – while taking better care of their people. I believe they are more than equal to that tasking," the CNO wrote.

The complete text of the CNO's message can be found in NAVOP 010/98 (CNO Washington, D.C. 151947ZOCT98).

Story by CNO Public Affairs.


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PS Form 3526, September 1998 (Reverse)

By Sarah Burford

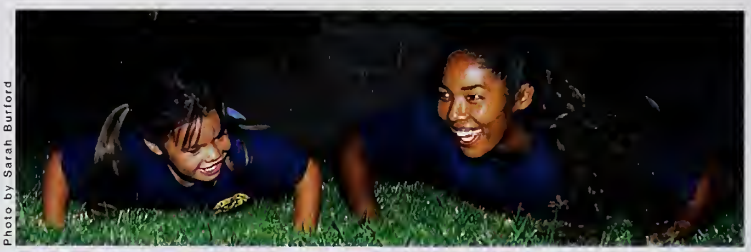


Photo by Sarah Burford

CM2(DV) Lisa Correa mixes P.T. with quality time as she teaches her daughter, Jasmine, the fine art of the push-up.

My Mommy's a Mermaid

Construction Mechanic 2nd Class Lisa Correa gets called all kinds of names – "Mud Puppy," "Mermaid," and "Seabee Jane," to name only a few. But for this Sailor, wife and mother, the only name that matters to her right now is her new title of Underwater Construction Technician (UCT), or as the Navy's diving community might say, "Seabee Diver."

Correa recently received her certificate from the Naval Construction Training Center's Underwater Construction School and earned a distinctive place in Navy diving history, becoming only the second woman, and the first African-American woman, to qualify as a Seabee Diver. Though the recognition has been "nice," she is quick to point out that the job is what really matters – and the chance to do something she has always wanted to do.



Photo by JO1 Rodney Furry

Born and raised in Japan, Correa's formative years were spent as a "Navy brat," following her father around the world while dreaming of the day when she too could have a Navy career.

"I had seen those big Navy posters used for recruiting, with people in uniform doing their jobs," Correa said. "I wanted to be on a Seabee poster."

Following boot camp and "A" school, Correa was assigned to Naval Mobile Construction Battalion 4 (NMCB-4). But she wanted something more. "Being a mechanic is oil change after oil change and that starts to get pretty monotonous. *I* wanted a change," she said.

Then she discovered diving.

"Strong mind, strong body" is a way of life at the Dive School. During the six months of training in Panama City, Fla., students undergo rigorous physical training as well as classroom instruction in basic medicine, advanced physics and emergency procedures. The school boasts a 62% attrition rate. Beyond that, Correa had another obstacle to overcome. She was one of only two women in her class.

Unlike standard Navy Physical Readiness Requirements that have separate standards for men and women, the dive school has one standard. Everyone is rated the same. Correa found herself constantly challenged.

But Correa's first taste of diving made all the hard work worth it. Though she admitted it was an overwhelming experience. "It was weird," she said. "You really feel like a visitor in another world, and you understand just how much you have to respect that world."

Correa gives much of the credit for her success to her husband, who is also a Seabee, and her four-year-old daughter, who loves to tell everyone, "My mommy's a mermaid!"

Burford is assigned to Public Affairs, Construction Battalion Center, Port Hueneme, Calif.



Correa is the first African-American woman to qualify as a "Seabee Diver."

Sculpting

At first glance he looks like any other chief petty officer. But, upon closer examination, there are two things that distinguish him: a red rope that hangs around his left shoulder and a badge with the words "Recruit Division Commander" attached to his pocket. This man takes raw, civilian molds and sculpts them into the Sailors of our future.

Chief Boatswain's Mate (SW) Jeffery A. Dickinson from Lenexa, Kan., like all Recruit Division Commanders, or RDCs, signed a pledge upon graduation from RDC school. The words are inscribed on a card he carries with him at all times and are a way of life for RDCs. It reads: "These recruits are entrusted to my care. I will train them to the best of my ability. I will develop them into smartly disciplined, physically-fit, basically-trained Sailors. I will instill in them, and demonstrate by my own example, the highest standard of honor, courage and commitment."

"The recruits look to me to set the example, so I must handle and present myself in a professional manner at all times. I counsel them on personal as well as military issues. I enjoy watching the scared, disorganized, young people slowly become Sailors," said the 16-year veteran. "For the most part the recruits are motivated and it's up to me to bring out the best in each and every one of them. I get my reward when they pass-in-review and graduate."



Photo by JOC Paul Engstrom

He is currently pushing his eleventh division and has watched nearly 900 young men and women complete boot camp and head off to start their adventure.

THESE RECRUITS ARE

Dickinson is stationed aboard Ship 6 (USS *Carr*) one of 14 barracks named after Navy ships at Recruit Training Center (RTC) Great Lakes, Ill. Each ship has 12 divisions with approximately 88 recruits in each division. Three RDCs are responsible for each division. Last year, nearly 50,000 recruits passed through the doors of RTC on their way to the fleet.

Earning the title of RDC is not easy. It involves a stringent screening process followed by an intense eight-week course of instruction. Besides having outstanding evaluations, RDC selectees must be warfare qualified (waivers are considered on a case-by-case basis) and recommended by their commanding officer.

According to the barracks commander, LT Andress J. Lewis from Kalamazoo, Mich., Dickinson possesses qualities which make him one of the top RDCs at the command.

"In addition to being a top-notch RDC, he also takes on all sorts of collateral duties. He's on the command assessment team, tutors at a local elementary school and organizes base tours for local groups like the Sea Cadets. Just about everything that comes along, he grabs it and does it."

When asked how he feels about his job and the recruits he works with everyday, Dickinson's answer was short and to the point.

"A lot of people say this generation is lazy. That's nonsense. They just need someone to show them the way."

Moore is a journalist assigned to Navy Public Affairs Center, Norfolk.

Sailors

By JO1(SW) Kevin Moore

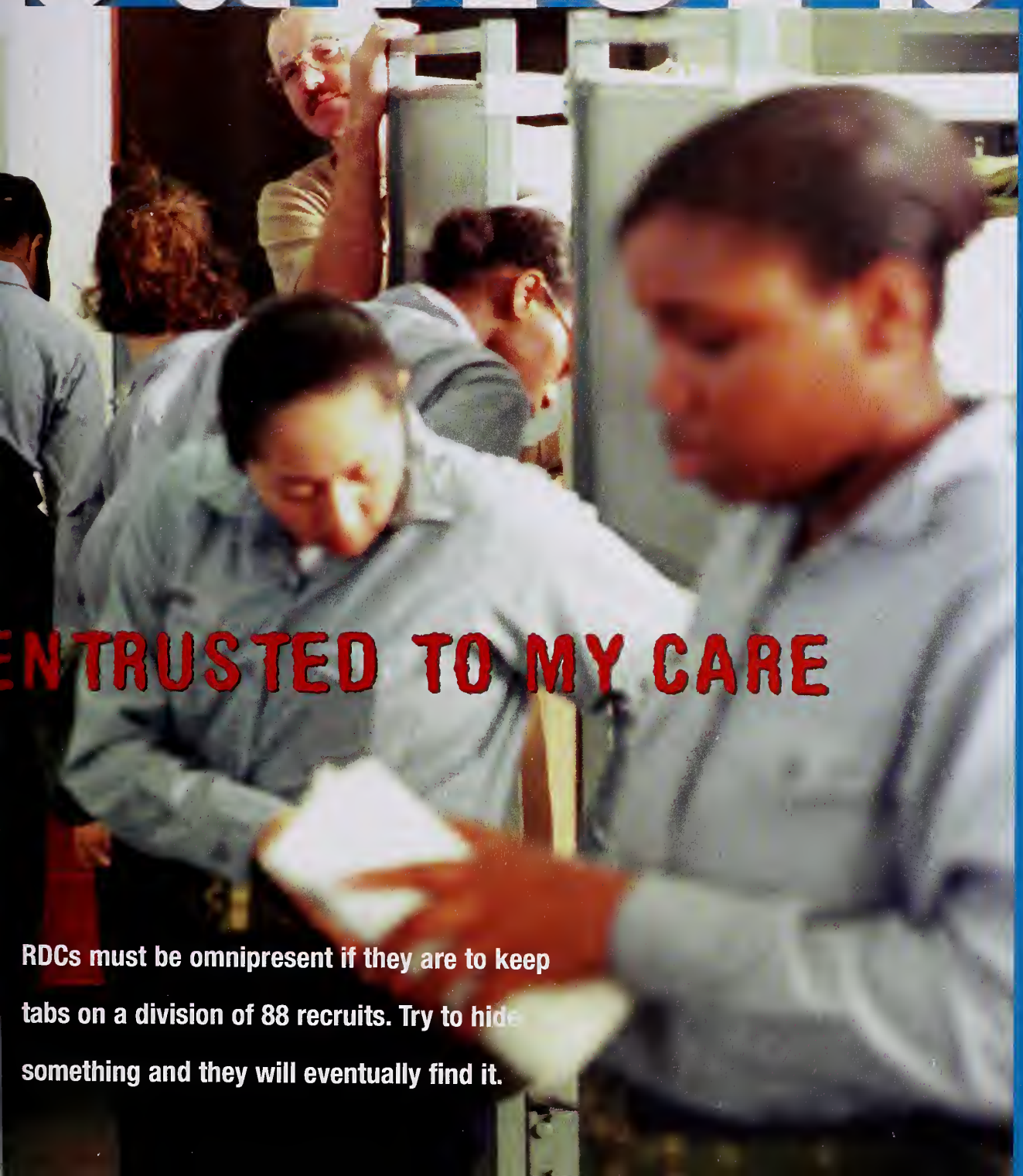
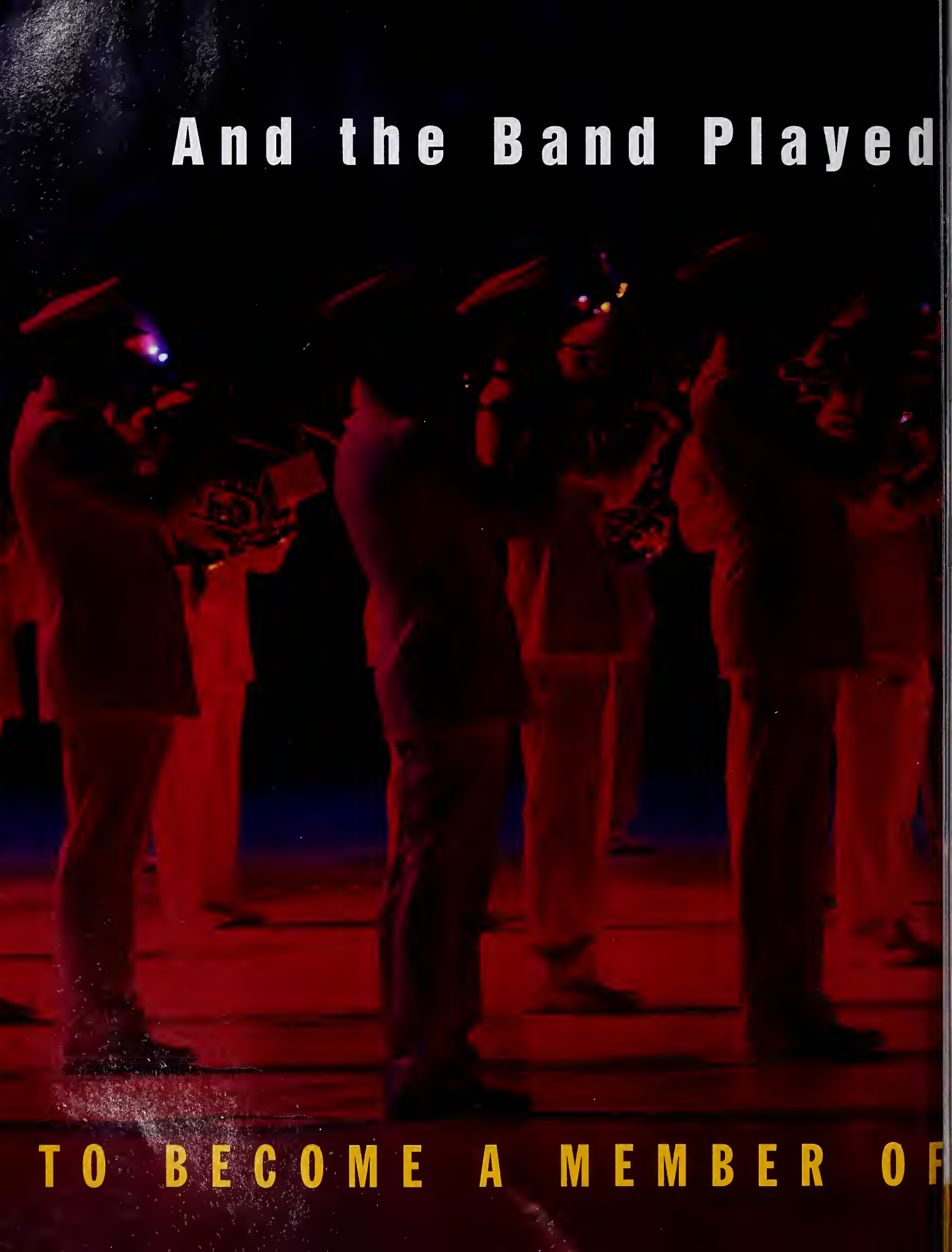


Photo by JOC Paul Engstrom

RDCs must be omnipresent if they are to keep tabs on a division of 88 recruits. Try to hide something and they will eventually find it.

And the Band Played



TO BECOME A MEMBER OF

Story and photos by PH3 Lena Gonzalez

On

It has been five, long, exhausting hours. Standing at attention, they wait for the final announcements as the heat from the lights beats down. They have practiced and practiced and practiced. Each piece is now flawless – intricate movements repeated to perfection. Finally, it's over. The last rehearsal for the show's finale is wrapped up and with aching feet, sore legs and a sigh of relief they slowly exit the arena and retreat to their dressing rooms. Tomorrow evening thousands of people will fill the arena to watch military bands from all over the world. The U.S. Navy will be there – and they will be ready.

The U.S. Navy Band recently joined other military bands at a world-renowned, international Swedish Army Tattoo at the Globe Arena in Stockholm. This year's concert showcased military bands from Norway, Great Britain and Sweden as well as the United States.

The Navy Band doesn't often get the opportunity to travel overseas. Two years ago they journeyed to St. Petersburg and Kaliningrad in Russia to help celebrate the Russian Navy's 300th Anniversary.

But according to Musician 1st Class Connie Frigo, a saxophonist from Endicott, N.Y., the band travels quite a bit within the United States. "The great thing about the traveling is that when we do public concerts, 95% of the time the places we perform are completely booked," said Frigo. "Thousands of people are watching us. We attract mostly war veterans and it's a great feeling to see the outpouring of enthusiasm for us."

The U.S. Navy Band tours one particular section of the country each year. The tours last approximately 30 days, give or take a day or two. Last year they performed all along the West Coast in California, New Mexico, Arizona and Nevada.

Unlike most ratings in the Navy, becoming a member of the U.S. Navy Band takes more than just boot camp and "A" schools. To become a member of any

THE U.S. NAVY BAND
OU HAVE TO BE SPECIAL.

of the 12 Navy bands throughout the fleet, you must have an extensive knowledge of music and pass a difficult audition. But to become a member of the U.S. Navy Band, you have to be special.

"An advertisement was sent to my sax teacher at Ithaca College in upstate New York," said Frigo. "At the time I knew [retired MUCM] Dale Underwood, a world-renowned saxophonist in the music community. He made the Navy Band familiar to me and he helped pave the way for saxophonists to make military bands a career."
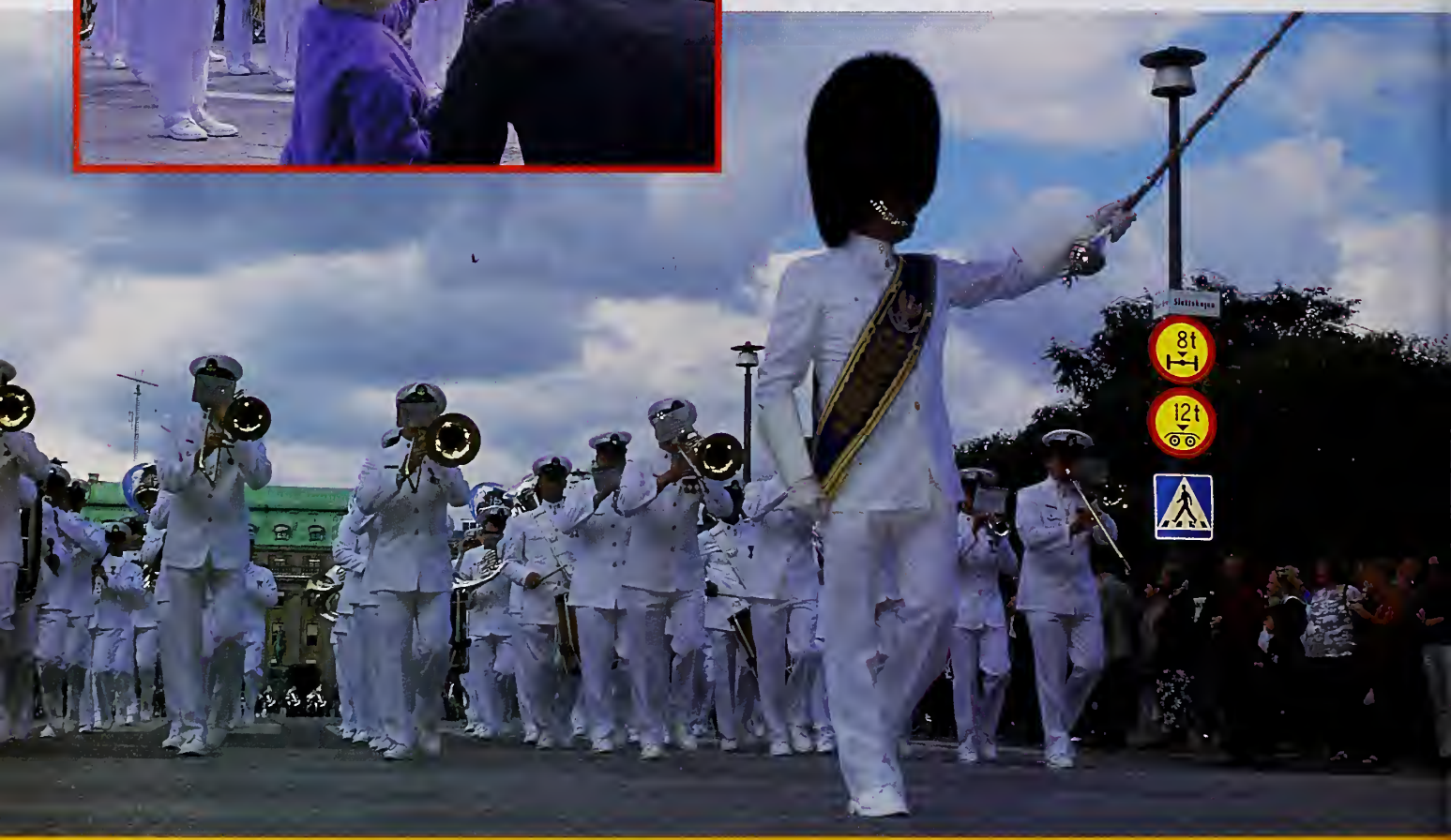
The U.S. Navy Band advertises for new members mostly through schools and trade papers. Frigo was a junior in college when she auditioned for her section.

But the men and women who make up our Navy's finest concert band are not just musicians – they are also Sailors.

A mother and her child enjoy the music of the U.S. Navy Band at a square in downtown Stockholm.



The U.S. Navy Band marches down a crowded street in Stockholm.



Music Around the World

The Navy has two premier bands, the U.S. Navy Band in Washington, D.C., and the U.S. Naval Academy Band in Annapolis, Md. They are the Navy's finest, but certainly not the only ones out there. The Navy supports 12 fleet bands that provide music and entertainment to all of our Sailors in all parts of the world.

FLEET BANDS IN THE UNITED STATES:

1. **Pacific Fleet Band** – CINCPACFLT, Pearl Harbor
2. **Atlantic Fleet Band** – CINCLANTFLT, Norfolk
3. **Navy Band Great Lakes** – Naval Training Center, Great Lakes, Ill.

They participate in physical training, take the Physical Readiness Test every six months and are evaluated in the same manner as anyone else in the fleet.

These musicians work extremely hard at what they do. They practice for hours and sometimes are asked to perform at a moment's notice. Basically they're on call 24 hours-a-day.

"The hardest part about our job is having to be flexible because anything can happen to our schedule and our performing situation. I think all of us are at such a level of training that the act of performing is what we want to do. We don't consider that hard. That's our passion," said Frigo.

The U.S. Navy Band is an organization consisting of many intelligent and incredibly talented artists. They hold bachelor's and master's degrees in music and a few even have their doctorates. When they decided to join the Navy it was because of their love of music and a desire for a prestigious career as a professional musician.

"I can't think of another place where you would find so many talented and intelligent people in one setting," said Frigo.

For these Sailors, their love of music and their desire to perform makes any sacrifice worthwhile. Their dedication, skill and talent makes them the best of the best.

Gonzalez is a photographer's mate assigned to All Hands.



MU1 Connie M. Frigo, a 26-year-old saxophonist from Endicott, N.Y., performs alongside her shipmates at an open concert in a public square in downtown Stockholm. Frigo has been with the Navy Band for five years and is a graduate of Ithaca College in upstate New York.

4. Navy Band Jacksonville – Naval Air Station Jacksonville, Fla.

5. Navy Band Memphis – Naval Support Activity Memphis, Tenn.

6. Navy Band New Orleans – Naval Support Activity New Orleans

7. Navy Band Newport – Naval Education and Training Center, Newport, R.I.

8. Navy Band San Diego – Naval Air Station North Island, Calif.

9. Navy Band Seattle – Naval Submarine Base Bangor, Wash.

BANDS OUTSIDE THE UNITED STATES:

1. CINCSOUTH Band – Naples, Italy

2. 6th Fleet Band – Naples, Italy

3. 7th Fleet Band – Yokosuka, Japan


U.S. NAVY
U.S. NAVY
Photos courtesy of the Blue Angels
U.S. NAVY
Blue Angels



True Blue

Millions of spectators gather all across the country every year for a chance to glimpse something spectacular. They come to see the Navy's Flight Demonstration Squadron, the Blue Angels, and some of the best flying in the world.

But before those planes can take to the air, a hand-picked, specially-trained crew works to ensure that those blue and gold fighters are solid, safe and awe-inspiringly beautiful. It takes a special Sailor to lead that ground crew. Here are the stories of two Sailors who have what it takes to prepare the "best of the best."

By JO1(SW) Dave Fitz



AS2 LeJuan Clay, Crew Chief for Blue Angel No. 5, takes his responsibilities very seriously. "That pilot's life is in my hands."

Fostering Success

Aviation Support Equipment Technician 2nd Class LeJuan Clay grew up mostly in New York City and should be, by his own admission, "strung out on drugs, in jail or dead." Instead, he is a crew chief for the Navy's premier flight demonstration team. But then Clay has always been different.

Clay grew up in and out of foster homes. He lived with two different families in New York and five in Southern California and has six foster brothers and sisters.

"When I lived in Manhattan, I would sneak up on the roof, like the other kids, to get away from the world. I would watch the planes take off from LaGuardia Airport. I always wished I could be on one."

Twenty years later, Clay got his wish.

This year, as Crew Chief Bravo for Blue Angel No. 5, Clay will travel to 17 different locations all across the United States aboard the Blue Angels' C-130 support plane, "Fat Albert," to perform engine/instrument checks and preflight inspections of "his" aircraft.

"I love putting on the Blue Angel uniform every day."

Every time he walks onto the flight line, Clay is ready. "I can't be complacent. That pilot's life is in my hands."

Unlike in the fleet, Blue Angel pilots do not inspect their own aircraft – that responsibility falls squarely on the shoulders of their crew chiefs.

Clay describes his relationship with his pilot as very close, as if he were part of his family. "LCDR [Scott] Beare is a great person and pilot. I have all the respect in the world for him, but there is a deeper bond there. It is more than shaking his hand and putting him in the jet. He's appreciative of what I do. And that makes it all worthwhile."



Without the tireless efforts of their crew chiefs, the Blue Angels would never get airborne.



AE1 Karen Marini is the first woman in the history of the Blue Angels to be selected as a crew coordinator.

Checkin' Six

Even though she has performed the pre-flight routine hundreds of times, Aviation Electrician's Mate 1st Class Karen Marini from New Haven, Conn., still gets nervous. Though not as bad as the first time.

"I was out there with thousands of people staring directly at me. My knees were shaking terribly, my salute was trembling, but I got through it."

She has gotten through many during her first year with the Blues. "The Blue Angels are a unique part of the Navy and the uniform represents the teamwork and traditions from which we all stem. From the color of our suits and the American flag on our sleeve to the never-ending hard work that goes into earning our crest," she said.

"The training program for a crew chief is phenomenal. There is a lot of information to learn and the responsibility is unnerving at times. This job cannot be taken lightly; the jet and the pilot's safety are my responsibility."

But working with LT Doug Verissimo, the pilot for jet No. 6, has made it rewarding. "He is very laid back and shows his appreciation often. The bond between a crew chief and a pilot is incredible. Doing the simple things such as changing the tension level on the stick to adjusting his seat level are major things for the pilot. Our goal is to make the pilots comfortable and for them to worry as little as possible."

The biggest obstacle Marini has to overcome as a crew chief is her height. The only woman assigned to the crew chief shop, she is only 5'4" while the other crew chiefs are 5'10" and taller.

"The support from the guys in the shop helped me overcome such things as reaching the ladder and diving into the intakes to inspect the engine blades. It may not seem like much, but the team depends upon everyone doing their job. had to find a way to get it done."

Marini said she hopes more women apply to the team. Currently only 12 of 125 crewmembers are women. "It is a lot of work but very rewarding! I would tell future Blue Angels, men or women, to learn as much as you can, not only about your particular rate but all that-concerns the aircraft. It is all essential to the team's common goal."

Next year Marini will serve as one of two crew coordinators. It will be the first time in the history of the Blue Angels that a woman has held that position. The crew coordinators are responsible for the overall training of the maintenance and support team in all squadron procedures. They coordinate ground operations necessary to facilitate a Blue Angels' performance.

Marini said she is excited about the new challenge but sad to leave the crew chief shop. "I feel we are a very tight-knit group because we all know the depth of the positions we hold. We look after each other in the shop, on the flight line and on the road. The guys I work with are knowledgeable in many different platforms of Navy and Marine Corps aviation."

Something else Marini said she would miss when she leaves the Blues is, "meeting the children," her favorite part of the job on the road.

"Walking the crowd line on the road and seeing the glow in the eyes of the children because of whom and what we represent puts everything into perspective."

Fitz is a journalist assigned to Blue Angels Public Affairs.



RM2 Kurt Essebaggert, a Navy recruiter in the tiny Nebraska town of Scottsbluff (pop. 13,566), will go wherever he can to find future Sailors. Ten miles east of Scottsbluff is Chimney Rock, a landmark on the route of the old Oregon Trail.

Story and photos by JO1 Robert Benson

High Plains Drifter

Cows fascinate Radioman 2nd Class Kurt Essebaggert. He wonders why they stop eating and stare every time he pulls his government 4X4 off dirt road 87 and honks his horn. He also wonders why bullet holes riddle every highway sign near his duty station in the tiny village of Scottsbluff, Nebraska. Or how grasshoppers grow to be as big as Swiss Army knives and why it seems every Ford and Chevy pickup has a rifle rack mounted on the rear of the cab.

The list of unanswered questions grows daily for the big-city-schooled Essebaggert, who assumed duties as the the Navy's recruiter in Scottsbluff nine months ago. But thanks to Scott Fegler, a farmer at the edge of town, Lucy Cirille, a waitress in the city's only café, and many others like them, some of his questions are getting answered – slowly, but answered just the same.

This place is definitely different.

Scottsbluff is far from any ocean. In fact, the nearest body of water is probably Rosemary Johnson's backyard swimming pool on Route 9. With a population of 13,566, Scottsbluff is a typical farming town and Essebaggert, a Denver native, is like a fish out of water as he learns to adjust to Scottsbluff's somewhat slower way of life.

Often acting as the sole recruiter for much of two states, Essebaggert is constantly on the road visiting towns so



Essebaggert won't get much help from this stranger, but he tries anyway. "I'll do anything for a laugh out here. You need to laugh to break the monotony."



Kari Semroska, a student at Chadron High School, shares a smile with Essebaggert.

remote, so secluded, so far from anything, that he's an attraction every time he makes a school visit or house call. People stop and stare, they whisper and point. They call their friends, who gather to watch from a distance as the lean, six-footer walks by in his dress whites.

"When I heard I was going to be stationed in Scottsbluff," recalled Essebaggert, "I did a double take and asked, 'where?' I had to go look at a map to find it."

During his first month at the recruiting station, Essebaggert just observed, and at times admitted he was "completely lost" as he tried to learn the idiosyncracies of recruiting in a place where the Navy is as foreign as... well, a battleship on the Platte River.

Perhaps he was overwhelmed by the dizzying miles he and his fellow recruiter had to drive to visit schools and potential recruits' homes (up to 6,000 miles per month). Or maybe it was the things he didn't learn in recruiting school, like how to flag down help when your car slides off an icy road into a snowbank – a road where you could wait for hours before another car appears on the horizon. Or how to safely maneuver your car through a passing herd of cattle.

If there is one thing I'm good at, it's getting out and talking to people.

"This place is definitely different," admits Essebaggert. "We have a large area to cover (parts of Wyoming and Nebraska) and most of it is the same – farm fields and nothing else." The long drives give him a lot of time to observe. He knows how much a bale of hay weighs. He knows how many telephone poles make up a mile. And he knows just how damn tough it is to recruit in Nebraska.

But that's no problem for Essebaggert. He's got recruiting talent in his blood. His reason for becoming a recruiter, he claims, remains simple, "to make a difference in kids' lives." And the only way he knows to achieve that goal is by talking.

"People like to chit-chat out here," said the 26 year-old. "It's not like a large town where people you run into quickly say, 'Hi' and then, 'Bye'. Out here they'll stop and talk for 10 minutes or more at a stretch – complete strangers."

Strangers for only a matter of seconds. That goes away as soon as he

lays his wit, humor and confidence on them. "My mom says I have the gift of gab. If there's one thing I'm good at, it's getting out and talking to people."

Essebaggert said he once recruited a young man in a Subway restaurant. "I was putting up a poster in the Subway and got to talking with one of the customers. He was so impressed that he went and joined the Navy a week later."

Sometimes Essebaggert has a tougher time selling the Navy. Like three months ago, when he visited a small house in the country 65 miles from Scottsbluff. "I had to go there to do an interview with a potential recruit. I could understand what the boy was saying, but I couldn't understand his parents because of their thick accent. First time I met him, the father said 'es a nicst de ut, gua go gita he-bon.' I was completely baffled so I just smiled. Luckily I had my chief with me who was from the area and he understood." He translated that phrase ("It's a nice day out, I'm going to go get a T-bone.") and everything else during the interview.

During home visits, Essebaggert does his best to teach what life in the Navy is like, something he admits is tough when he speaks to those who have never been out of the state.

The uniform he wears is often enough to show one good reason for joining the Navy – travel. His ribbons and medals show his diverse background – a Joint Meritorious Unit Commendation from the Philippines, a Good Conduct Medal from USS *California* (CGN 36), and a Navy Achievement Medal from Japan. The most international thing in Scottsbluff may just be Essebaggert himself. His office wall is lined with command plaques from Japan to Washington. He shows his Navy photo album to everyone he can – photos of port calls in Hawaii, Hong Kong, Korea, Australia and the West Coast.

"I've been all over and I let people know that. It helps sell the Navy."

Still, selling remains difficult at times. "They call this job an emotional roller-coaster, and that's even more true out here in Nebraska," said Essebaggert. "We have recruiting goals every month that we have to meet. Sometimes we can easily do that, and other months it's more of a challenge."

Another challenge is overcoming negative responses. "For me, 'no' is a challenge. It makes me try harder. I don't push that person harder, I push myself harder. I can't understand why anyone would say 'no' to pay, education, room and board and a great way of life."

But hey, that's just one more thing we can chalk up to things Essebaggert doesn't understand.

That, and cows and grasshoppers…

Benson is a photojournalist assigned to All Hands.

For me, 'no' is a challenge. It makes me try harder.



Essebaggert spots a familiar face inside a classroom at Hay Springs High School.

Story and photos by PH2 Joseph Gormley III

The German frigate, FGS *Brandenburg* (F 215), is cutting slowly through the chilly waters of the North Sea just east of Denmark when the sonar operator notices a new blip on his screen indicating a contact crossing the ship's path.

"*Sonar Kontakt!*" he calls from his station in the ship's Combat Information Center. "*Peilen* [bearing] *zwei-sieben-null* [two seven zero], *Entfernung* [distance] *vier tausend funf hundert* [4,500] yards," he continues, in smooth, although accented, German. It is, after all, only a second language to him – being that he is a master chief petty officer in the *United States* Navy.

Wait a minute.

What's he doing on a German frigate?

He's part of the U.S. Navy's "Personnel Exchange Program," or PEP, a program which allows American Sailors to serve with another country's navy while still on active duty.

Master Chief Sonar Technician (SW) James Stone is what the Germans call a *sonar meister* – translated, he's the ship's sonar chief. But although he gets paid to hunt submarines, he's also an unofficial American ambassador. "We're ambassadors in a way that's different from diplomatic officials or even American servicemen serving in Germany. Our primary mission for being here with the PEP program is cultural exchange. And the only way to really make that happen is to break the language barrier. People aren't going to open up to you if they can't understand you. We help bring America to them. And we take a little piece of Germany with us when we leave."

According to LCDR Ed Olenick, PEP coordinator in Washington, D.C., there are currently officers, chiefs and petty officers serving in other navies all over the world. "We've got people in Australia, Canada, the United Kingdom and Germany, to name only a few. It's a two-year tour with the option to extend for a third. It is a one-for-one exchange; we send a pilot in exchange for a pilot and a sonar tech for a sonar tech. What's available depends on the needs of the other navies."

[Exchange Soldier/Sailor]

Austau



He may be a master chief, but STGCM(SW) James Stone still has to help "man the rails" aboard FGS *Brandenburg* (F 215).

chsoldat



As a *sonar meister*, Stone has to help train the German equivalent of the U.S. Navy's operational specialists. *Obermaat* Sacha Gierden (a senior petty officer) from Cologne, Germany, gets instructions at the sonar station in *Brandenburg's* Combat Information Center

Stone lives in *Brandenburgs*'s home port of Wilhelmshaven, just west of Denmark.

"The chiefs here are a little different from chiefs in the U.S. Navy. Once you make chief in the U.S., you're expected to be more of an advisor. Here, I'm more of a technician. As an E-8 at my last sea command, I had 30 people working for me. Here, I don't have anybody."

All crew members, regardless of rank, eat in a "mess style" setting and punctuality is expected. "If you're five minutes late, forget it," said Stone. "You'd better plan on catching the next setting – and you better show up five minutes early just to be safe."

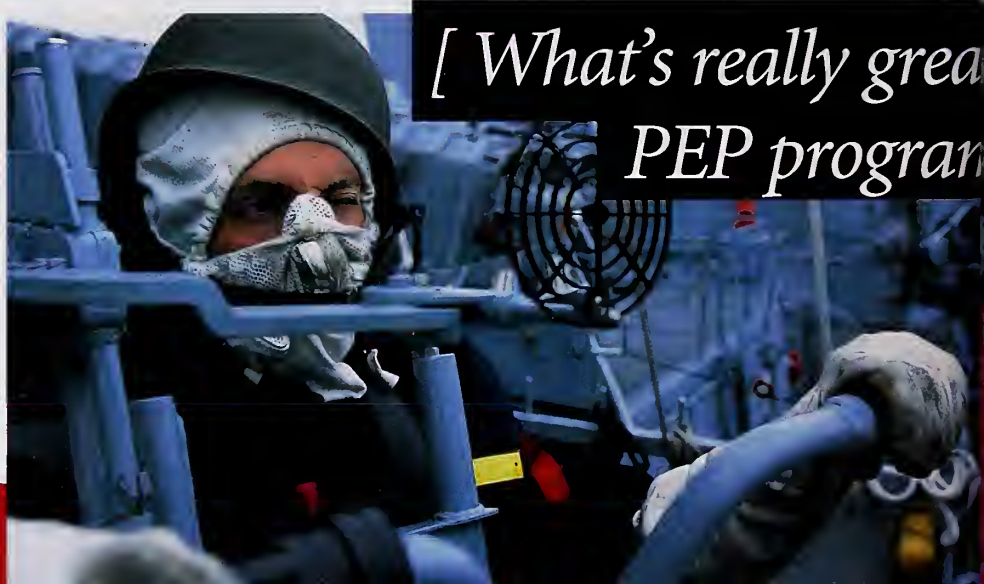
"The food here took a little getting used to," said Stone. "If something is *gekocht*, it's boiled. *Gebraten*, means it's pan-fried and *gebacken* is oven-baked."

The noticeable lack of water fountains can at times be inconvenient.

"Sometimes it's just plain frustrating," said Stone. "I was drinking water out of the tap in my stateroom one day when my roommate stopped me. 'Don't drink the water,' he said, 'it's got chlorine in it.' I asked him if I was going to die? He said, 'Probably.' I think he was kidding." Tap water is generally used only for washing. If you want water, you'd better get it bottled in the ship's store, or *kantine*.

Kameradschaft (comradeship) is important in the German Navy. *Oberstbootsmann* Udo Müller, the senior member of the chief's mess, said that *Kameradschaft* is sort of like being there for each other. "Germans are very social," said Stone. "Everyone wants to be accepted."

Senior Chief Electronics Technician (SW) Rick Breininger of Fast Boat Patrol



[What's really grea

PEP program

[What's he doing on a German frigate?]

Squadron 3 (3.*SchnellBootGeschwader*) is another PEP sailor serving in Germany. He lives in Flensburg, a port town just 15 minutes south of the Danish border. From the time he leaves home in the morning until the time he returns, he speaks only German.

Breininger found that despite Flensburg's remoteness, it is fascinating duty. "What's really great about being in the PEP program is not serving with Germans, but rather living almost like Germans. I say 'almost' because we don't pay taxes. I know a lot of guys who live on the military bases in Germany and shop at the commissary and eat at the mess. They live in their tiny little piece of America. But that's not us. We have to buy groceries, get car parts and do all those things forward-deployed Americans would do without the benefit of a nearby military base. The nearest commissary to us is an eight-hour drive away."

There are some basic differences between the U.S. Navy and the German navy. "For every day of duty a German sailor stands, they get a point," said Breininger." If they stand duty on a Friday, they get a point and a half. If it's a Saturday or Sunday, they get two points." These points get added up at the end of the month by the *DZA-Beauftrager* (duty time equalization representative) who will then give that person time off, extra money or a combination of both based on how many points they have accumulated.

The other big difference is that you can get beer on board – on tap or in cans. While underway, crew members can have two 'units,' that is two glasses or two cans, a day. "They take their drinking seriously here," adds Breininger, "but they are responsible about it."

Breininger's ship, the tender FGS *Rhein*, supports the fast patrol boats within the squadron. Unlike American tenders, German tenders have work centers, what they call containers, which can be craned on and off depending on the ship's current mission. Breininger's ET shop is one of those containers. It is slightly smaller than a school bus and is home to his staff and all his electronic components.

Breininger and one other Navy Sailor, a lieutenant who teaches at the German Naval Academy, represent the only American naval presence in the Flensburg area.

Fast Boat Patrol Squadron 3 will soon be decommissioned and its boats sold to a foreign country or transferred to another squadron. The tender's mission will be changed to minesweeping. But Breininger won't pack it in and return to the United States. With less than a year until retirement, he plans to finish his career in a similar billet at a nearby base. Hoping he and Stone can continue to be American ambassadors to the German navy.

Gunder is a photojournalist assigned to All Hands.

For more information about the U.S. Navy's Personnel Exchange Program, visit www.anchorgroup.com/PEP-Germany



bout being in the
not serving with Germans,
ut rather living almost like Germans.]

In the German navy, the chiefs are more like technicians than advisors. ETCS(SW) Rick Breininger and *Bootsman* Andre Seifert, an *electroniker* (electronics technician) from the former East Berlin, troubleshoot the radar on board FGS *Fuchs* (S 6146), one of the fast patrol boats in Breininger's squadron.



Torpedo Ch

Quartermaster 1st Class (SW) Jon Thurston is lying in his rack this morning, blankets pulled high over his head. Outside his stateroom he can hear the crew whispering, trying hard to keep

"MOST PEOPLE DON'T E
WERE KIND OF



aser

Story and photos by JO1 Robert Benson

their voices low. It's not working. He can hear every word.

Still, that's not what is keeping him awake. Thurston's eyes would be closed – and closed tight – if it weren't for the constant pounding of waves on the side of *his* boat – a boat which is 200 miles south of Kauai, in the open Pacific Ocean. The 85-foot torpedo retrieval boat he commands is bouncing like a bobber. And today, the power of the sea is showing no mercy.

N KNOW WE EXIST
ORGOTTON OVER H'ERE."

Thurston yells to the bridge to take up slack on the winch line being used to lower a torpedo into the water.



QM1(SW) Jon Thurston and a member of his crew haul in a torpedo.



Finally Thurston has had enough. He heaves himself out of his rack and makes his way to the bridge, being sure to grab a cup of coffee on the way.

No sugar and no cream. Black – that's the way he likes it.

This is Thurston's boat. There is little doubt about that. Not many E-6s in the Navy can claim a boat as their own. But Thurston is the commanding officer of a multi-million dollar vessel. He has a crew of seven and the authority to call the shots.

"I love having my own craft, crew and the faith of the Naval Station C.O. to run them the way I want," said Thurston. "For me, this is the best sea duty in the Navy."

As craftmaster of the Pearl Harbor-based craft, Thurston is charged with running and maintaining the 20-year-



The evening sun paints Thurston in a warm glow as he makes an entry in his logbook.

old boat. He also carries out other skipper duties such as overseeing the well-being of his crew, scheduling upkeep periods with the local Intermediate Maintenance Facility, and submitting award packages for those under him.

The mission of his boat, *Chaparral* (TWR 7), is to provide service to the fleet – primarily submarines – in retrieving torpedoes. The rear two-thirds of the sea-going craft is open deck which leads to the water at the stern for the recovery and stowing of torpedoes. *Chaparral* also acts as a search and rescue platform for the Coast Guard in Hawaii.

"Most people don't even know we exist," said Thurston. "We're kind of forgotten over here. I was in the Navy for 12 years before I even learned that torpedo retrieval boats existed."

Then one day two years ago he learned about the boats in a quick way when he received orders to command one of them.

During a recent exercise, *RIMPAC '98,* Thurston and his crew played the part of a blockade-runner cutting through naval ship lines and a fishing boat with illegal contraband. They've ferried around VIPs, admirals and movie stars and they've transported thousands of Sailors to submarines.

All of it under the leadership of a good driver and a couple of diesel, 900-horsepower engines.

"The boat handles like a Corvette. Even though it's 85 feet long, I'm able to maneuver it into a 90-foot pier." Thurston's ability to command is born of traits that he says every craftmaster has, "strong leadership, good boat handling skills, knowledge of the rules of the road, qualification as conning officer, helm, and lookout, and a desire to excel."

Traits he has honed over a matter of not days or weeks, but months and years. A curve that has spanned his entire 12-year quartermaster career.

Right now Thurston is working on finishing his master's degree. Ten years from now he says he will probably be a lieutenant commander.

Now, there's a vision: Thurston on the bridge of a brand new destroyer in the year 2008. With torpedo retrieval boat memories strong in his head, there is no doubt – he's still in charge.

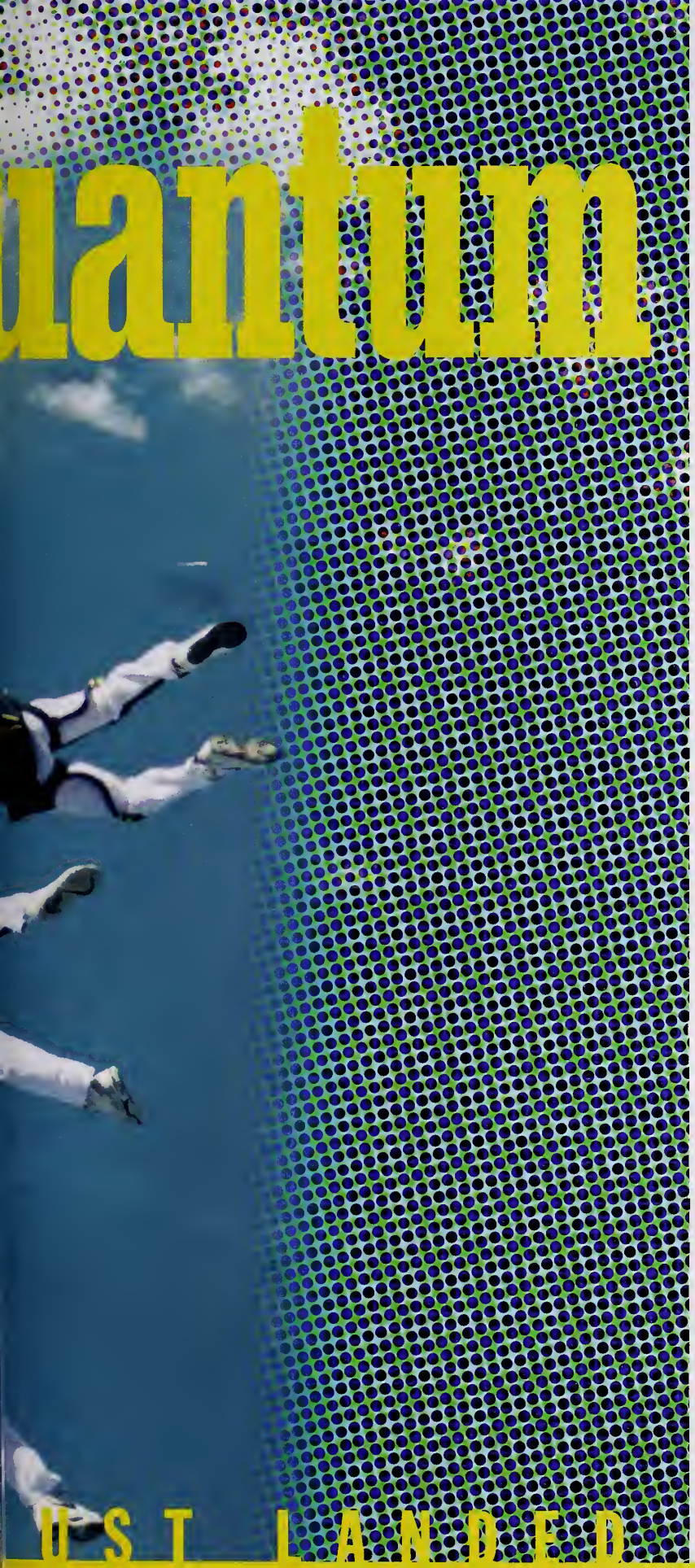
Benson is a photojournalist assigned to All Hands.

By PH2 Ted Banks



Eight Navy SEALs fall to Earth at speeds in excess of 60 mph during a Leap Frog demonstration.

SUPERMAN



U.S. Navy photo

Leap

The crowd waits with biting anticipation. Thousands of feet above their heads, a team of specially-trained Navy SEALs exits the rear of a C-130 cargo plane with exacting precision. On the ground, fathers lift children onto shoulders as mothers point out the multi-colored smoke streamers deployed by the jumpers. With their chins held high, the crowd anxiously scans the sky above them, each wanting to be the first to see them coming. Then, finally, a chute deploys and the air show crowd erupts in an ovation of cheers as they read the word "Navy" stitched into the canopy. The men glide gracefully to the ground, each one hitting the mark with a wave and a smile to the thousands who have gathered in the sun. As the final member of the team sets down with the American flag trailing behind him there is no doubt the U.S. Navy Leap Frogs have arrived.

Based out of Naval Amphibious Base Coronado, Calif., 28-year-old Michael Ford of Lyneville, Ala., proudly serves his country as a member of this elite para-batic, free-fall parachuting team known as the Leap Frogs.

Ford performs 50 to 60 precision free-fall demonstrations a season throughout the United States, Canada and Mexico.

"Being able to travel and perform in front of millions of people is a really great feeling," said Ford. "I am proud to be part of a team that puts on a show that is exciting, visually stimulating and very intense."

Ford is one of 15 Navy SEALs on the team, which consists of two officers and 13 enlisted personnel from both the East and West Coast Special Warfare

Photo by PH2 Ted Banks



OS2(SEAL) Michael Ford and the Navy Leap Frogs put on a show that is "exciting, visually stimulating and very intense."

SEALs (from left) BMC Dwight Settle from Houston, OS2 Michael Ford, BM1 James Boycheck from Fernel, Nev., and RM2 Jon Smith from Naples, Fla., go over mental notes after completing a "quad-by-side" jump at Marine Corps Air Station Miramar, Calif.



Commands. In addition to skydiving, Ford is also a expert in demolition, small arms, surveillance and combat swimming.

As a Navy Leap Frog, Ford has taken his highly sophisticated airborne insertion SEAL training and transformed it into a visual aerial display consisting of free-falling formations and precision canopy maneuvering.

One of the many aerial maneuvers Ford performs is the "quad-by-side." The Leap Frogs are the only jump team in the world that has been able to successfully perform this maneuver during an air show performance. Ford and three other SEALs are held together by quick release webbing that joins them as one, forming an inter-linked semi-circle, while all four deployed canopies race toward the ground at speeds in excess of 60 mph.

"The 'quad-by-side' is the most dangerous formation we do at shows," said Ford. "It gives me an incredible adrenaline rush, unlike anything else I have ever experienced."

But before Ford and his team members make their six-minute, death-defying, 60 mph, 13,000-foot jump, they spend hours upon hours preparing – checking their chutes and then checking them again. As the team rigger, safety is always on Ford's mind.

"Not only do I want to ensure my chute opens safely, but I want to ensure that everyone else on the team gets what they need.

"The day goes by quickly, and the next thing you know, you've made your jump and you are back on the ground," continued Ford. "The best part of the job is when we jump into elementary and middle schools. It's as if Superman just landed. Knowing that I have been a positive role model and that I could have influenced some of them to someday join the Navy are pretty good feelings."

Banks is a photojournalist assigned to the Navy Public Affairs Center, San Diego.



The Navy Leap Frogs perform at 50 to 60 precision, free-fall demonstrations each year all across the country.

Aircrew Survival Equipmentman Airman Randy Hooks has been in the Navy for less than two years, but already he has met hundreds of people and made dozens of life-long friends. At EOD Mobile Unit 3 at Naval Amphibious Base Coronado in San Diego, he made the friend of a lifetime – Dinky.

Story and photos
by PH2 Aaron Ansarov



PRAN Randy Hooks has been attached to Dinky, both personally and professionally, since he reported to MK 6.

FRIEND OF A LIFETIME

Dinky is a 24-year-old Atlantic bottle-nosed dolphin trained for the Navy's Mark 6 (MK 6) Marine Mammal System. Dinky has been with the Navy Marine Mammal Program since he was three. He is assigned to Hooks for the time being, or maybe it is the other way around.

Originally from Jackson, Miss., Hooks never dreamed that someday he would be working with a dolphin – and getting paid for it. "Some people go to marine parks and oceanariums and pay substantial amounts to spend a few hours with the dolphins. And it's my job to spend most – to all – of the day with Dinky. It's unbelievable," said Hooks.

Hooks has been working with Dinky for eight months and has learned that precision counts. Dolphins can be exacting creatures, especially when it comes to the hand signals that Hooks uses to direct his mammal friend.

"If you make an arm movement incorrectly, they just look at you like you don't know what you're doing. When I first started working with Dinky, he walked all over me."

Dolphins are very trainable animals. Once they are trained, they know exactly what they are signaled to do and, when signaled correctly, do it without question.

The Navy's dolphins are fed about 10 to 15 pounds of capelin, herring, mackerel and smelt a day to meet their dietary needs. "These dolphins are treated better than most humans. The fish that we receive is restaurant quality, and is thawed out and cleaned just before feeding.

This can get expensive – food and medication alone cost about $15,000 per year per dolphin – but the payback in the number of human lives saved by these animals is incalculable.

Mobile Unit 3 has six highly trained MK 6 swimmer defense dolphins.

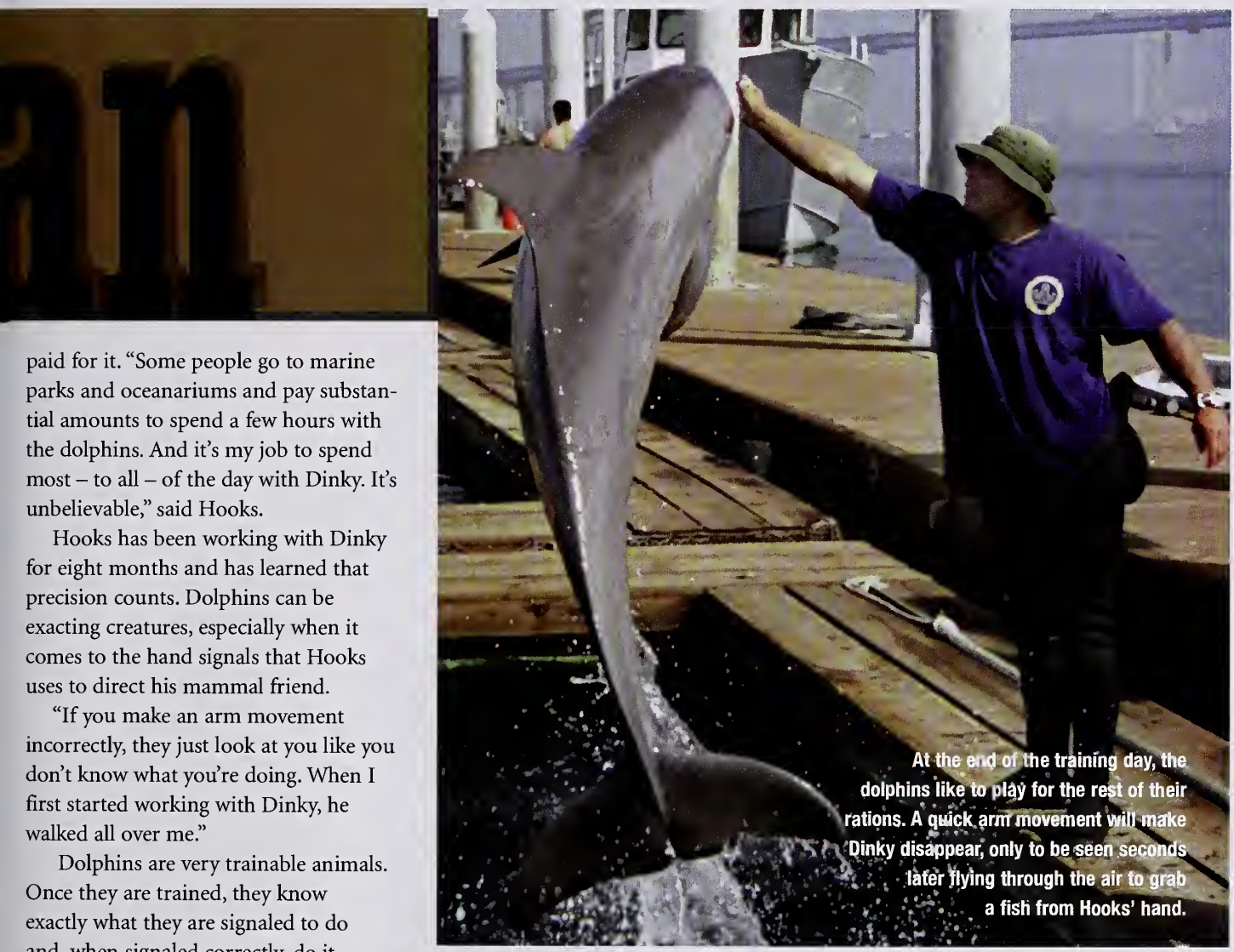
The Navy's Marine Mammal Program has fielded four operational marine mammal systems – the MK 5 sea lion object recovery system, the MK 4 and MK 7 mine-hunting systems and the MK 6 system.

The MK 6 system is a dolphin swimmer and diver detection system that can mark the location of any intruder that may pose a threat to a ship or a pier. It was used in Vietnam, the Persian Gulf and most recently to support waterside security at the 1996 Republican Convention in San Diego.

The Navy loans a small number of its dolphins to non-government organizations such as universities and marine parks for research and for breeding purposes.

"Working with Dinky has been a once-in-a-lifetime experience for me that I don't think I would have had the opportunity to do had I not joined the Navy," said Hooks.

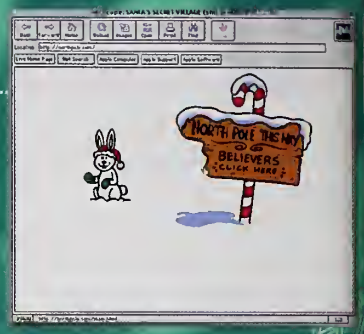
Ansarov is a photojournalist assigned to Navy Public Affairs Center, San Diego.



At the end of the training day, the dolphins like to play for the rest of their rations. A quick arm movement will make Dinky disappear, only to be seen seconds later flying through the air to grab a fish from Hooks' hand.

cybersailor@mediacen.navy.mil

CyberSailor



Santa's Secret Village

'Tis the season (to be surf

Cool Jobs

In this issue of *All Hands*, we've been looking at some of the cool jobs Sailors are doing around the world.

There are some web sites dedicated to these jobs. The Blue Angels' site (www.BlueAngels.navy.mil) provides visitors with a look at the Navy's only aerial demonstration team. Learn more about the people who make up the Blues, the squadron's history, or their current schedule of appearances.



Blue Angels

Of course, I tend to think that all Navy jobs are pretty cool in one way or another. Almost every ship, squadron and shore station has a photo section dedicated to what their Sailors are doing everyday. While not all homepages are listed, a good place to start is with Navy Online's Web Site Index (www.ncts.navy.mil/nol/cat.html). Check out these and other Navy sites and see what makes the Navy special.



Navy Online

Season's greetings! I just finished updating my wish list for Santa (added some more RAM and that DVD drive I've been wanting), e-mailed it and now the wait is on!

At this time of year cyberspace is bursting with sites dedicated to the holidays. Many will delight the kids and, let's face it, we all get a little kid-like this time of year (yep, even that salty old command master chief).

First stop, of course, is the North Pole. There must be a lot of techno-savvy elves around, because there's no lack of good sites. For instance, Santa's Secret Village (www.northpole.com) is a truly GREAT place to visit. From the homepage, you can venture into Santa's Den and see what the jolly old elf is up to, and pick up some ideas for holiday movies, books and music. In Mrs. Claus' kitchen, recipes for cookies, cakes and pies are there for the taking. How do Chocolate Mint Snow-Top cookies sound? The same can be said about The-North-Pole (www.the-north-pole.com). Not only will you find recipes and the chance to send Santa an e-mail, but you can read about how the holidays are celebrated around the world. So use your favorite search engine and find a site that suits your tastes.

Want to learn more about Hanukah, or perhaps add to your holiday recipe book? A collection of pages titled "How to Celebrate Hanukah" can be found at www.templeshalom.com/holidays/hanukah/hanukah_index.htm. Here are articles on family games, history, recipes and other topics about the Festival of Lights.

A relative newcomer to the holiday season, Kwanzaa, is also found on the net. CNN's Kwanzaa page (www.cnn.com/

The Underwater Web

Hour after hour I searched. I used every trick I know on every search engine I could find. I can only conclude that submarines are as stealthy on the web as they are underwater.

I was hoping to find the official sites for the Navy's SSN and SSBN fleet for review and consideration for the CSSOE Awards. Unfortunately, there aren't many around (at least I couldn't find them).

Rather than review the handful I could get to, I decided to ask for your help. If you are assigned to or know of a sub with an official website, send the URL to me. If I get enough of them, I'll feature the submarine websites in the April issue. Just send me an e-mail at **cybersailor@mediacen.navy.mil** and be sure to put "Submarine Website Search" in the subject line.

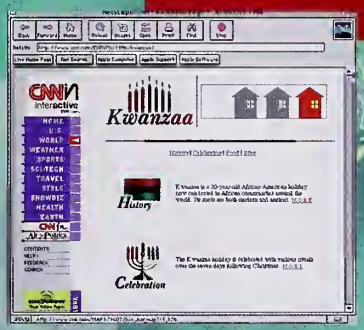
I look forward to hearing from you.



The-North-Pole



How to Celebrate Hanukah



CNN's Kwanzaa Page

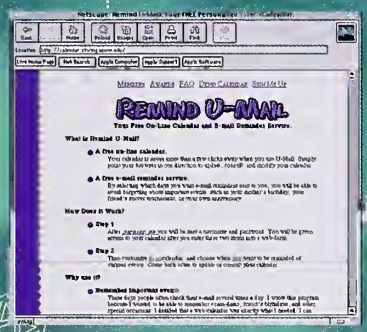
EVENTS/1996/kwanzaa) provides some great background and stories, not to mention more stuff on food. This holiday celebration traces its creation to the African first-fruit harvests. The name comes from the Swahili "matunda ya kwanza" which translates to "first fruits." Of course, CNN also provides links to other sites around the world.

This might be a good place to remind everyone with kids that they need to pay special attention to the parental thing this time of year. Letting the little ones surf alone could lead them into places where selling is more important that telling. And don't forget about those nefarious (look it up) beings lurking about who use seasonal phrases to bring up their sites in searches for Christmas, Hanukah, Kwanzaa, etc. What appears on the screen might have nothing to do with the holidays.

Whatever your pleasure, don't forget to send out those holiday cards. Need a reminder? Try Remind U-Mail (**calendar. stwing.upenn.edu**) for free e-mail messages reminding you of events and occasions.

If you've procrastinated through Thanksgiving and early December, you're probably panicking. For your family and friends in cyberspace, there's always e-cards. There are plenty of sites offering free e-mail greetings for any special occasion. Just fire up your favorite search engine and look for "greeting cards." You'll find dozens of sites, like Hallmark Connections

Remind U-Mail



Hallmark Connections



(**www.hallmark connections.com**) that offer free electronic greeting cards for anyone with e-mail capability.

Wherever you celebrate this holiday season, the Internet can help you stay close to those who count. It can give you the lowdown on worldwide celebrations and traditions, as well as the stuff to make some traditions of your own. Check it out and have a great holiday season!

Cyber Sailor

Eye on the Fleet

EYE ON THE FLEET is a monthly photo feature sponsored by the Chief of Information Navy News Photo Division. We are looking for HIGH IMPACT, quality photography from SAILORS in the fleet, to showcase the American Sailor in ACTION.



APACHE WRAP

Military Sealift Command's light, medium-speed, roll on/roll off vessel USNS *Soderman* (T-LMSR 299) lowers an AH-64A *Apache* helicopter to a pier in Rijeka, Croatia. The helo is en route to Tuzla, Bosnia, in support of Operation *Joint Forge*.
Photo by JO2 Mike Powell



HEART FORMING

Sailors on board USS *John C. Stennis* (CVN 74) assemble on the flight deck in the shape of a heart as *Stennis* pulls into her new homeport in San Diego, Calif. The crew spelled out "We love (heart) San Diego."
Photo by PH2 Aaron Ansarov

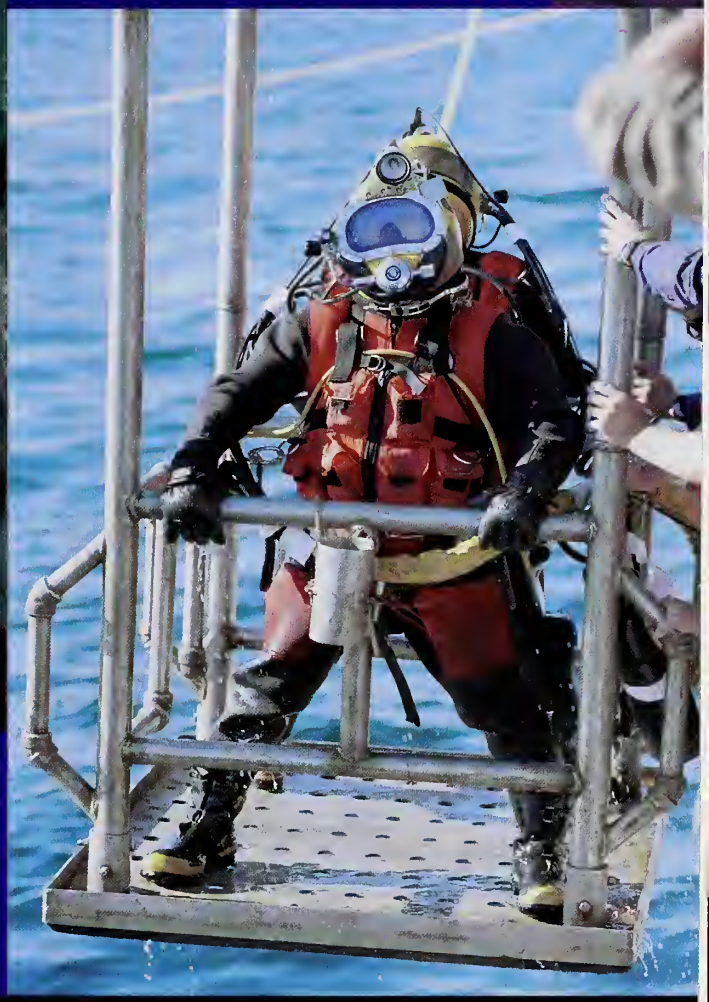


DAMAGE CONTROL

QM3 Matthew Gorski from Barstow, Calif., plots a course for USS *Enterprise* (CVN 65) away from the Virginia Capes as Hurricane Bonnie bears down on the Atlantic coastline.
Photo by PH1 Mario P. Romero

HARD DIVE

Divers assigned to Mobile Diving and Salvage Unit 2 are lowered by Sailors on board USS *Grapple* (ARS 53) to the crash site of SwissAir Flight 111 to retrieve victims and aircraft debris.
Photo by PH1(DV) Andy McKaskle



To be considered, forward your images with full credit and cutline information, including: full name, rank and duty station. Name all identifiable people within the photo and include important information about what is happening, where the photo was taken and the date.

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Eye on the Fleet



PAST PRESENCE

Navy Quarterback Steve Holley displays the initials "JM" on his helmet in honor of his fallen teammate James McCray who died this past summer while on his midshipman's cruise.
Photo by PH2 Damon Moritz



TURNING TWO

AT2 Tom Crowe from Ligonier, Pa., performs preventive maintenance on an F-14 *Tomcat* on the flight deck of USS *Dwight D. Eisenhower* (CVN 69).
Photo by PH2 Shawn Eklund



HUMP DAY

MA2 Victor G. Vallejos from Oak Harbor, Wash., assigned to USS *Abraham Lincoln* (CVN 72), makes friends with a native during a recent port visit to the United Arab Emirates.
Photo by PHAN Matthew Hollowell





STACKED DECK

Sailors from Deck Division on board USS *Abraham Lincoln* (CVN 72) take advantage of some pierside time in the United Arab Emirates to catch up on maintenance.
Photo by PHAN Matthew Hollowell



SWINGIN' SINGLE

A Sailor practices his stroke in the early-morning sun at NAS Oceana's golf course.
Photo by LT Mike Lent



Shipmates



Aviation Electronics Technician Airman
Daniel Razevich from Troy, Ohio, was awarded Meritorious Captain's Mast at Naval Station Rota, Spain. Razevich was praised by his chain of command for possessing exceptional motivation, professionalism and dedication to duty. He is the first airman to qualify as an In-Flight Technician (IFT) on VQ-2's EP-3E *Aries II*.



Aviation Structural Mechanic 2nd Class (AW)
Larry Ferguson received the Naval Reserve Meritorious Service Medal for his work as a base police officer for NAVBASE San Diego. A 16-year Navy veteran, Ferguson resides in South County where he is a Sergeant with the Department of Corrections.



Aviation Warfare Systems Operator 2nd Class (NAC)
Andrew Wallace was selected Senior Sailor of the Quarter (3rd Quarter) 1998 for Helicopter Anti-Submarine Wing, U.S. Pacific Fleet, San Diego. The Grand Terrace, Calif., native was responsible for developing a training program for HH-60H Combat Search and Rescue aircrew – training he used during an exercise in Spokane, Wash., to rescue two people from a downed helicopter.



Disbursing Clerk 1st Class (SW)
Kenneth Godby was selected as Personnel Support Activity Det. Great Lakes, Ill., Sailor of the Year for 1997. A native of Pekin, Ill., Godby was recognized for his performance as the assistant pay director, travel branch supervisor and total quality leadership facilitator. He successfully reduced the backlog of travel claims by increasing efficiency from a 16-day to a five-day turn around.

On assignment



Photo by STGCM(SW) James Stone

"Being on a German ship (FGS *Brandenburg*) is way different from an American ship," said PH2 Joseph Gunder, who traveled to Kiel, Germany, to do a story on the Personnel Exchange Program (Page 28). "Besides being able to get beer on tap while on board, you're treated a little different. It's a lot more like a small family, except without sisters around. I was also given the opportunity to go for a ride on a *Lynx* (a European helicopter). I knew they were going to do winch exercises that afternoon, but I expected the helo to come in for a landing, not pull me up 30 feet from the flight deck! What a trip, what a ship!"

Did you know?

Sea Chanties were the earliest form of music practiced by American Sailors. These harmonious melodies were used to coordinate evolutions on deck, such as the raising and lowering of sails, and to help soften the rigors of shipboard life. (See story p. 16)

The Blue Angels were formed at the end of World War II by order of then-Chief of Naval Operations ADM Chester W. Nimitz, who believed a flight demonstration team would keep the public interested in naval aviation. The team first performed in June 1946 at their homebase, NAS Jacksonville, Fla. Two months later on Aug. 25, 1946, the Blue Angels introduced their now-famous "diamond" formation. By the end of the 1940s, the Blue Angels were flying jet aircraft, the Grumman F9F-2 *Panther,* in demonstrations all across the country. In response to the demands placed on naval aviation during the Korean Conflict, the team reported to the aircraft carrier USS *Princeton* as the nucleus of Fighter Squadron 191 (VF-191), "Satan's Kittens," in 1950. (See story p. 20)

Scotts Bluff, Nebraska, is named in honor of a fur trapper named Hiram Scott who, deserted by his companions, died alone at the base of the magnificent formation of bluffs along the North Platte River in 1828. Although many other settlers died on the old Oregon and Mormon Trails (covered wagon trails which are still visible in the passes between the bluffs) as well as the Pony Express route, it is Hiram Scott for whom Scotts Bluff and the City of Scottsbluff are named. (See story p. 24)

Bottle-nosed dolphins always seem to be smiling. The shape of their short noses gives the lasting impression of a grin and makes this species of dolphin one of the best-known and most-loved mammals in the world. These dolphins measure about 15 feet long and can weigh up to 440 pounds. (See story p. 40)

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Photo by JO1 Robert Benson

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